DOCUMENT RESUME

ED 034 865 VT 009 845

AUTHOR	Perry, J. Warren, Ed.
TITLE	Manpower Conference for the Health Related Professions, and Dedication, School of Health Related Professions.
INSTITUTION	State Univ. of New York, Buffalo.
SPONS AGENCY	Rehabilitation Services Administration (DHEW), Washington, D.C.
PUB DATE	67
NOTE	153p.
EDRS PRICE	EDRS Price MF-$0.75 HC-$7.75
DESCRIPTORS	Community Colleges, *Conference Reports, *Health Occupations, *Health Occupations Education, Manpower Needs, Occupational Therapy, Physical Therapy, *Professional Education
IDENTIFIERS	State University of New York at Buffalo

ABSTRACT

More than 400 persons including national leaders in government, educational, and professional organizations and agencies attended the dedication and the 3-day conference intended to focus attention on priority needs. Conference papers include: (1) "Serving Is a Privilege, Not a Problem" by M.E. Switzer, (2) "Regional Medical Programs: Continuing Education for Health Related Professions, by F.L. Husted, (3) "The Allied Health Professions--at the Flood Tide of Opportunity" by L.D. Fenninger, (4) "The Challenge to Education for the Health Professions in Meeting the Health Needs of Society" by E.F. Rosinski, (5) "Educating for the 'Helping Professions': An Underview" by S. Touster, (6) "Community Colleges: A New Resource in Meeting Health Manpower Needs" by S.V. Martorana, (6) "Programs in Junior Colleges" by N.M. Bering, (8) "Graduate School Programs in Medical Technology" by R. F. Hovde, (9) "Education of the Certified Occupational Therapy Assistant" by R. A. Robinson, (10) "Clinical Education" by R. Smiley, (11) "The Occupational Therapy Consultant" by F.M. Stattel, (12) "Opportunities for Research in Physical Therapy" by A.J. Szumski, and (13) "Trends in Patient Care and in the Educational Patterns of the Health Related Professions" by C.A. Worthingham. Two dedication presentations are also included. (JK)

ED034865

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MANPOWER CONFERENCE FOR THE HEALTH RELATED PROFESSIONS

DEDICATION
SCHOOL OF
HEALTH RELATED PROFESSIONS

VT009845

State University of New York at Buffalo

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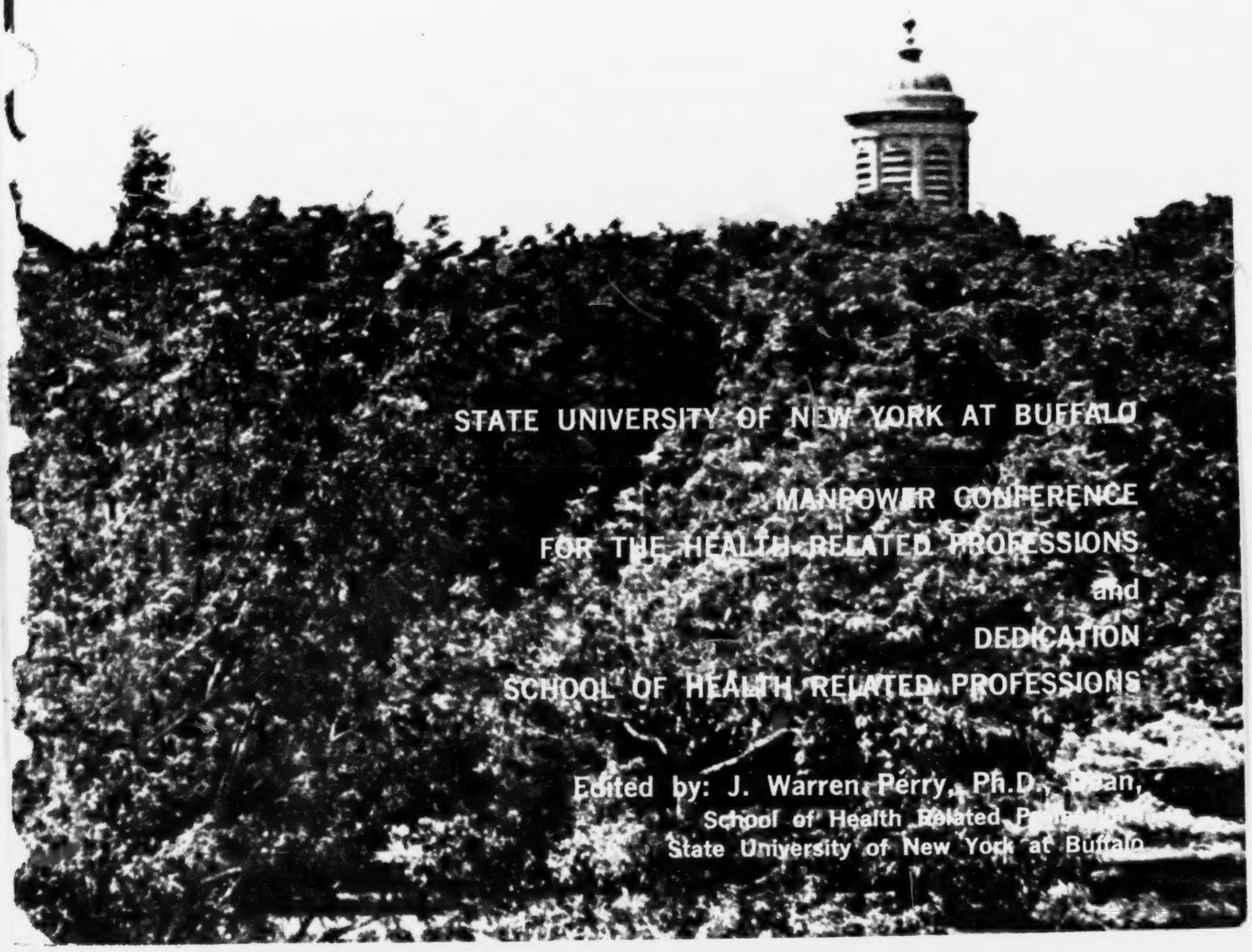

STATE UNIVERSITY OF NEW YORK AT BUFFALO

MANPOWER CONFERENCE
FOR THE HEALTH RELATED PROFESSIONS
and
DEDICATION
SCHOOL OF HEALTH RELATED PROFESSIONS

Edited by: J. Warren Perry, Ph.D., Dean,
School of Health Related Professions
State University of New York at Buffalo

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INTRODUCTION

At no time in history have the allied health professions been given a greater opportunity and challenge for growth and service as a part of the comprehensive health planning of each community, each State and the Nation. Major universities have responded to this challenge by creating new educational administrative structures in the form of departments, divisions, schools and colleges of allied health professions. By this redesigning of educational programs, individuals train together as students in much the same way that they are expected to work together in an interdisciplinary manner after graduation.

This bulletin records the Dedication Ceremonies of the State University of New York at Buffalo's School of Health Related Professions and of the Manpower Conference for the Health Related Professions that immediately followed. This was the dedication of an idea, not of a building or structure. It was an event created to recognize the manpower shortages existing in the allied health professions, and to focus the attention and energies of the State University of New York on these priority needs.

This Conference drew to Buffalo over four hundred persons interested in various phases of allied health; and among the speakers and participants were national leaders in government, educational and professional organizations and agencies. . . . all sharing their ideas with community health workers of Western New York, our clinical instructors from a five-state area, and our faculty, staff and students. Following the opening one-day session at the Statler-Hilton Hotel, each Department held on campus a two-day meeting with national consultants to help formulate plans and dreams for future implementation here.

The speeches printed here were some of the highlights of a very busy three days of formal presentations and informal discussions and seminars. On behalf of this School, I want to thank those speakers and consultants who used the Buffalo rostrum as a sounding board for their ideas and frank discussions of major issues involved in patterns of patient care and service, new professional roles, and new and proposed Federal legislation for the allied health professions. I also want to take this opportunity to express appreciation and gratitude to the Vocational

Rehabilitation Administration for the assistance given to SUNYAB for the presentation of the Manpower Conference.

No printed document can record the excitement created here on campus by these events, nor the stimulation the presence of these health leaders afforded this Buffalo program.

That is why we have made this written record of some of these ideas; for in an area where there is so much change, this may serve as a stimulus and an inspiration to others who are interested in advancing the cause and raising the banners for the allied health professions.

Buffalo, New York 1967

J. WARREN PERRY, Ph. D., DEAN
School of Health Related Professions
Professor, Health Sciences Administration

TELEGRAMS

The School of Health Related Professions was proud to receive words of encouragement and support from the following: Jacob K. Javits, United States Senate; Robert F. Kennedy, United States Senate; Richard D. McCarthy, Congressman; T. J. Dulski, Congressman; Nelson A. Rockefeller, Governor, New York; Frank A. Sedita, Mayor of Buffalo. These telegrams are being printed as a part of the official record of the Dedication.

WESTERN UNION
TELEGRAM

April 28, 1967 Washington, D. C.

It gives me great pleasure to send greetings on the auspicious occasion of the dedication of your new School of Health Related Professions. As one of New York's finest universities, you continue to contribute much to the vitality and progress of our State in the education of our future leaders. I urge you to continue in this fine tradition and I wish you continued success in the exciting years ahead.

Jacob K. Javits, United States Senate

WESTERN UNION
TELEGRAM

April 26, 1967 Washington, D. C.

I am pleased to have this opportunity to extend my greetings and congratulations to the State University on the dedication of your new School of Health Related Professions. These programs will be a valuable contribution to the field of medicine by helping to alleviate the shortage of trained personnel. I know that you are proud of the new School and look forward to its success. My best warm wishes.

Robert F. Kennedy, United States Senate

WESTERN UNION
TELEGRAM

April 29, 1967 Washington, D. C.

Congratulations to you, the faculty and the students as you dedicate the new School of Health Related Professions. I want to wish you all a happy and rewarding future. You will, I'm sure, make important contributions to such fields as occupational therapy, medical technology and physical therapy and all other programs in which you plan to train, and I hope you'll call on me for help whenever the occasion demands.

Richard D. McCarthy, Congressman

WESTERN UNION
TELEGRAM

April 29, 1967 Washington, D. C.

Regret that I am unable to join you at dedication of your new School. Our community will be enriched by this addition to the Health Sciences Center, and I take special pleasure in expressing my heartiest congratulations to all those who made this new School possible.

T. J. Dulski, Congressman

WESTERN UNION
TELEGRAM

April 28, 1967 Albany, New York

It affords me great pleasure to send cordial greetings to all present at the dedication of the new School of Health Related Professions.

My sincere congratulations to the State University of New York at Buffalo on this day. This is a most important event and marks a welcome advance in our efforts on behalf of health. My compliments to all responsible for this admirable consummation of your plans.

I am sure the Manpower Conference which is to follow the dedication will be most fruitful.

My best wishes for continued progress.

Nelson A. Rockefeller
Governor, New York

WESTERN UNION
TELEGRAM

April 28, 1967 Buffalo, New York

How glad I am to hear that the State University at Buffalo is taking a leadership role in the training of health manpower for the health programs of this State and country. I want to send my heartiest congratulations for the dedication of the new School of Health Related Professions and for a most successful Manpower Conference. Please extend to your guests my special welcome to Buffalo and to the Niagara Frontier.

Frank A. Sedita Mayor of Buffalo

Program
Manpower Conference

Monday, May 1, 1967
Golden Ballroom — Statler-Hilton Hotel

Chairman: J. Warren Perry

8:00- 9:00	Registration and Coffee
9:00- 9:30	Welcome—Martin Meyerson, Peter F. Regan
9:30-10:15	Mary E. Switzer, Keynote. "Serving is a Privilege, Not a Problem"
10:15-10:45	Frank L. Husted "Regional Medical Programs: Continuing Education for Health Related Professions"
10:45-11:15	Leonard D. Fenninger "The Allied Health Professions at the Flood Tide of Opportunity"
11:15-11:45	Edwin F. Rosinski "The Challenge to Education for the Health Professions in Meeting the Health Needs of Society"

12:00- 1:15	Conference Luncheon Saul Touster "Educating for the 'Helping Professions': An Underview"
1:30- 2:00	S. V. Martorana "Community Colleges in New York State: A New Resource in Meeting Health Manpower Needs"
2:00- 4:00	"Programs at SUNY/B Answer the Challenge" Representatives of: Community College Health Careers (P. F. Munson), Dentistry (J. A. English), Medical Technology (S. M. Cicarelli), Nursing (R. T. McGrorey), Occupational Therapy (N. B. Greenman), Physical Therapy (M. E. Sacksteder), Psychology (J. M. Masling), Rehabilitation Counseling (M. E. Jaques), Rehabilitation Medicine (A. C. Rekate), Social Welfare (B. H. Lyndon), Speech and Hearing (K. F. Thorn). Moderator: J. Warren Perry
4:00- 5:00	"HRP Looks to the Future: New Programs" Representatives of: Hospital and Health Care Administration (T.J. McHugh and M.E. Roth), Hospital Information Processing (E.R. Gabrieli), Lay Mental Health Counseling (R.R. Carkhuff), Medical Records Librarian (L.M. Huttsell), Pastoral Counseling (Rev. C.C. Bachmann), Radiological Technology (E.G. Eschner), Veterinary Sciences (T.S. Grafton). Moderator: Albert C. Rekate

Serving Is A Privilege, Not A Problem

Mary E. Switzer
Administrator
Social and Rehabilitation Service
Department of Health, Education and Welfare
Washington, D. C.

It is a great pleasure for me to be here today and join you in the dedication of this exciting new School of the Health Related Professions.

All of us are deeply indebted to President Meyerson, Vice President Regan, Dean Perry and the other forward-looking leaders of this University for recognizing the need for this Manpower Conference on the Health Related Professions. Once again the State University of New York at Buffalo has shown that a vigorous university, under dynamic leadership, can assume an important role in facing up to national problems.

As I look around and see some familiar faces, I realize that many of the things that the Vocational Rehabilitation Administration has worked for over the years are germane to *your* reasons for being here. It seems particularly fitting that the Dean of this new School, Dr. Warren Perry, is a "graduate" of the Vocational Rehabilitation Administration—although I must say we graduated him to you with a mixture of regret and pride. Knowing his philosophy and his capacity for planning, I had great faith in this new School from the outset.

Medical manpower procurement has been a preoccupation of

(*Miss Switzer's speech was read by Salvatore G. DiMichael, Ph.D., Director, Institute for Crippled and Disabled, New York, New York*)

Introduced by: J. Warren Perry, Ph.D., Dean, School of Health Related Professions, State University of New York at Buffalo mine since the days of World War II. At that time the seemingly insurmountable problems of short supply of doctors, dentists, and nurses, and the need to plan nationally a rationing program for those key medical professions required by the Services, were less acute than during the Korean War, and minor compared to what we would be faced with today in anything approaching total mobilization, in spite of the advances represented by this School.

In the first place, we dealt with a relatively few professions . . . doctors, dentists, nurses, sanitation engineers. The wars taught us more dramatically than any other experience what expertise can be learned to meet the emergencies of military medicine. Without being fully conscious of it and influenced by totally unrelated pressures, those responsible for trying to fill the manpower gaps created by the health needs of a growing population, expanded medical facilities and an increased range of services, built on the experience of military medicine. The corpsman, the ward assistant, the laboratory assistant—all still a part of the military establishment today—have helped to dramatize that an alert intelligent person, with some feel for people, can be trained to become a volunteer; in fact, an indispensable member of the health team.

We have taken for granted that the care of the patient of the future will be in many hands—sometimes, I think, too many — and the challenges faced in a setting like this University is to so conduct its educational process as to nourish and help to grow a basic sense of satisfaction in serving, so that in truth the privilege of serving will be more important in the life of that service than its problems.

As many of you are aware, the Vocational Rehabilitation Administration has been intensely interested in the development of meaningful programs for those in the health related services. This concern is as deeply rooted in our concept of service, in our philosophy of how to go about meeting the needs of disabled people, as it is in the numbers of health related professional workers who fall under the vocational rehabilitation umbrella.

After many years of grappling with health and rehabilitation problems, I am fully, almost painfully, aware of the difficulties involved in providing the best service to the greatest numbers. I have lived through the era of fractionation of service to the patient, particularly the hospital patient. I can recall the first "time and motion" studies undertaken to try to divide the work of the nurse into what a truly skilled, well-trained nurse was needed for, and what tasks could be performed by the so-called practical nurse, the aide, and the volunteer.

The highly technical aspects of modern medicine have required a whole new group of workers whose training and responsibilities are at varying levels. Sometimes the levels are controlled by the actual scientific requirements of the task to be performed—sometimes by the need for professional status for a new group joining the health team. The more highly developed a specialty becomes, the more inexorable the drive to break down the job into levels of skill required—for the increasing time necessary to round out professional training today makes it absolutely certain that some short cuts must be found or the very extension of professional training to more and more groups will have the effect of forcing less well-trained workers into the job.

As we constantly search for new methods and for new medical and technological breakthroughs that will expand our knowledge further, we must proceed to find the most effective ways of translating our "know how" into practical results for the sick person. I do not forget the patience and skill that all of this requires. What I do emphasize, however, is that, difficult as the work is, we *can* meet national needs if we commit ourselves fully and unremittingly to the task.

Health and related services in this country have become one of our major "industries," and this massive phase of our national life is going to grow each year for many years. It already is one of the principal fields of employment—in the professions, in technical work, and in the unskilled fields. Its shortages offer one of the most favorable labor outlets for the thousands of the unemployed in our cities if we could but mobilize the training needed for them.

The rate of this growth has been remarkable. In 1940, less than $4 billion, or four percent of our Gross National Product, was spent for health and related care. Twenty-five years later in 1965, the nation spent more than $40 billion, representing six percent of the GNP—and the figure is still going up.

The reason is simple and understandable: The American people want more and better medical care, and they are finding ways to pay for it. Their representatives in Congress and State legislatures are determined to expand and elevate medical service coverage for the people through both private and governmental programs.

We have known for years that the demand for far more allied health workers would become increasingly heavy. It was twenty years ago that we began the highly successful Hill-Burton program of hospital construction, which told us in advance that we should be building our staffing plans along with our physical plants. It was about the same time when the Veterans Administration began expansion of its hospital system, calling for more professional and technical personnel. Shortly after, the Hoover Commission report and then the Magnuson Commission told us again that steps should be taken to assure more trained workers to staff the nation's health care programs and facilities. In 1954 the Hill-Burton Act was further amended to make special provision for building rehabilitation facilities, diagnostic clinics and convalescent care institutions—and again we were faced with an increase of physical facilities without a proportionate increase in the professional workers needed to man them.

In the same year the Congress made important changes in the Vocational Rehabilitation Act—bringing new programs into being and launching a 10-year period of marked growth in services to the disabled of this country.

It was a decisive year for us in rehabilitation. Among other things, we knew that we must generate a broadly-conceived national training effort to secure thousands of young people for careers in rehabilitation—for without them, our plans for expanded services to the disabled would never be realized. We urged, and the President and the Congress agreed, that a special program of grants for training in rehabilitation be started.

We began in 1955 with $900,000 and a handful of students in training. This year we have nearly $30 million for the training program, with more than 5,000 young people pursuing graduate degrees or similar work, and another 7,000 taking short-term specialized courses. More than 400 colleges and universities are participating in the long-term training program, involving schools of medicine, education, social welfare, psychology and others.

I mention this to emphasize this one point: You *can* create modern training programs, you *can* expand the numbers of qualified young people ready to fill the openings in the developing health services—if you set yourselves a clear goal and then pursue it with unlimited determination.

Ask yourselves what you expect to achieve in the next ten years—and then do it.

Do not set a goal in terms of what you think you can do. Set a goal that reflects *your share* of the nation's problem and then meet it.

If you need some reassuring, join me in looking back over the last ten years or so. In 1955, a grand total of five students received their Master's Degree in rehabilitation counseling in this country. This year the total will be about 800. During that period, nearly 3,300 rehabilitation counselors have completed their training.

In physical therapy, occupational therapy, social work and a long list of other professions in rehabilitation, the story of growth is much the same. In Speech Pathology and Audiology, for example, we had 23 trainees when we began in 1958. Last year there were 684.

All of this effort in rehabilitation training and education, as well as our programs in research, construction and other phases, comes down to one basic question: Are we improving and expanding the services that reach the disabled person? Only when we can answer this question with an unqualified "yes" are we achieving the real objective.

In the vocational rehabilitation program, we know quite specifically that the volume of services is increasing and we have much evidence that the quality and methods are improving. Last year 154,000 disabled youth, men and women completed their rehabilitation programs and entered into various types of work. We believe that the majority of them were much better prepared for living and working than in the earlier days of this program.

This, I believe, is the same question that must be asked as we set about to expand and improve the nation's effort in the critically important field of the health related services: Are we preparing to better meet the health needs of larger numbers of people in their communities?

Certainly no discussion of manpower, particularly one concerned with the specialized area of health services, can be carried on except in the context of the community's needs and commitments. This is definitely a two-sided coin. It involves, in the first place, a continuing analysis of what services are needed, what groups in our population have medical problems that go unattended, and what kinds of training and professional guidance are lacking.

When we look at what the experts tell us are the nation's needs today in just a few fields, we could become discouraged. For example:

—we are short 50,000 doctors;

—the proportion of dentists to the population is declining;

—even with 600,000 nurses, the shortage in every community is apparent.

We need:

"—over 9,000 additional medical technologists.
—over 4,000 additional physical therapists.
—over 4,000 additional dieticians.
—over 42,000 licensed practical nurses.
—over 48,000 hospital aides and orderlies."[1]

In rehabilitation we need:

—1,500 rehabilitation medicine specialists;
—13,500 physical therapists;
—6,000 occupational therapists, and so on.

But our job is not to brood over what we have not, but to organize to improve the situation. And in so doing, we must be aware of the pools of man and woman power from which we can expect to draw our candidates.

Woman power is an important asset and will become more so. "Women have been responsible for the major share of the growth in the labor force, representing 60 percent of the total increase since 1940. They now represent one-third of all workers. The increase in the number of women in the labor force is one of the most significant indicators of the economic, social and political changes that are occurring in our dynamic society." [2]

This is important for the health related professions which traditionally draw from women in the labor force. But the fact also has its problems. The greatest increase has been in married women working, and women coming back into the labor market in their 30's and 40's. To take full advantage of this large pool means accommodations must be made in training professional workers and in finding new ways to keep them in the labor force. In addition, "one of the problems that must be explored is the system of barriers which prevent many health workers from moving up the career ladder. Many health jobs are now dead-end jobs. But they need not be so. Poor prospects for advancement aggravate recruitment problems. We need research on lateral and upward career mobility to break down some of these barriers.

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[1] Wilbur Cohen, "Womanpower in the 1970's" (speech presented to the Brookings Institution Manpower Seminar, Washington, D. C., April 13, 1967.)

[2] Cohen, "Womanpower in the 1970's."

"A registered nurse, for example, can move up in her career to a supervisory position but she cannot easily move into another discipline such as physical therapy. She has to go back and start all over again.

"What system could be devised to give credit for work experience—skills acquired on the job, to help people advance in a profession? Could equivalency examinations be developed to permit them to advance without taking academic course work?

"Much research must be done on the evaluation of work experience as compared with professional schooling. This is one of the big job development problems.

"Upward and lateral mobility is a vital necessity if we are going to attract people to these jobs and retain them in the profession. And women will be the greatest benefactors of this enlightened approach." [3]

Going back to our own frame of reference, it is clear that the allied health professions must determine what they are actually willing to do to achieve our ends. Philosophically, the sky's the limit. Pragmatically, as professionals, we will have to reevaluate many well-established traditions and perhaps give up a few sacred cows. We need an open-ended search for more effective techniques, more effective equipment and more effective health personnel. The long standing patterns of in-group professional status in the medical field must dissolve into mutual respect and cooperation. The separations now existing between areas of medical expertise require a far less dogmatic approach.

In the very broadest sense, therefore, the challenge before this Conference during the next two days is to formulate some creative and intelligent ideas on what is required of the health related professions to provide the necessary services, and with what imagination and verve the health related professions are willing to respond. It is by no means an easy assignment.

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[3] Cohen, "Womanpower in the 1970's."

So often, what the professional person knows is far less important than how he practices. Today this is increasingly important, simply because the advances in medicine and related fields are making the physician, in practice, more and more dependent upon the daily work of his associates in allied health fields. How well they care for the patient depends largely on how well they practice together. The best-trained people in the world can and sometimes do provide the worst care when they are so individually preoccupied with technical knowledge that they never take time to measure the success or failure of their collective efforts.

We are especially aware of this in rehabilitation, for without a pervading belief in the total person, there is no such thing as a rehabilitation team.

Some authorities believe—and I share their view—that the physician of the future will be the manager of a unit of allied health workers. This group, working as a unit, will care for the patient, with each member responsible for certain phases of treatment and rehabilitation, and with a sense of unity among the team members which remove the barriers of disciplinary parochialism on behalf of the patient.

When this picture of practice materializes as a general pattern, we will finally see a continuous flow of expert attention to prevention, detection and diagnosis, acute care, recuperation and rehabilitation—all as different facets of the same process.

Some pattern of this sort seems certain to evolve in the coming years. It is for this reason that I have such a deep sense of involvement in what you are planning and doing here at Buffalo. From your concept of training in several of the health related professions, there will come more than the sharing of professional and technical knowledge. This approach to education will build into the minds of the young person an understanding and appreciation for those who will work beside him.

It will prepare him or her for functioning as a professional team member, so that a "norm" of daily interaction between them will be established and made a part of daily practice.

And finally, it will offer the physicians of this country a new and better kind of professional manpower, basically conditioned to working with others, and committed to a unique new combination of quality and efficiency in the care of patients.

Millions of our young people want to enter the service professions because they are strongly motivated by a sense of social conscience. But they also want to be convinced that what they commit themselves to is in fact a part of the wave of the future —a discarding of old ways and the forging ahead with new and better ways of meeting human needs. Young people are committed to service today as they have not been for many decades. The Peace Corps, Vista, the Teacher Corps, the hundreds of individual community groups all over the country, try to put right the wrongs of our generation in civil rights, education, and many other areas.

It is your task and mine to prepare them to accept new ways not only to solve old problems, but also to tackle the new ones without fear, and to achieve a sense of purpose and fulfillment. This we must do.

I am sure my Washington colleagues on this program this morning will join me in saying that we will give you every bit of help we can from Washington. The President is thoroughly imbued with the importance of building the nation's health manpower. The Congress has been interested, aggressive and supportive for the training of more professional people in our work.

In 1965 many major amendments were made to our rehabilitation law, including one that emphasized and underlined our responsibilities for training in the several professions directly related to rehabilitation. Along with this has been a consistent support of appropriations to proceed with the training of more people. These resources represent a part of our commitment to move ahead in meeting our share of the national need.

Last year the Congress passed a history-making law, the Allied Health Professions Assistance Act. This we will hear more about this morning. It gives the nation a foundation for a major, concerted attack on the personnel shortages that confront nearly every phase of health care.

With these and other programs now being mounted, Washington will be joining you in a new and vigorous effort to master the problems of professional manpower in the exciting years ahead.

I, for one, look forward to this period when we will have a chance to demonstrate all over again that this nation is young, vital, and full of confidence. We Americans have a way of getting things done, and we will share many proud moments in the next decade in solving our professional manpower problems in health services.

■

Regional Medical Programs: Continuing Education for Health Related Professions

Frank L. Husted, Ed.D.*

Chief, Educational Research Section
Continuing Education Branch
Division of Regional Medical Programs
National Institutes of Health
Washington, D. C.

Dr. Perry, special guests and "fellow contributors" to this conference on Health Manpower. I experienced more than the usual degree of pleasure in being here with you on this occasion. First, the importance of this meeting and the opportunity to represent the Division of Regional Medical Programs carries its own pleasant responsibilities. Second, it is nice to be home again. Those among you who live in this area have watched what must

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*Now Associate Dean for Academic and Student Affairs, School of Health Related Professions, State University of New York at Buffalo.

Introduced by: Douglas MacN. Surgenor, Ph.D., Provost, Faculty of Health Sciences, State University of New York at Buffalo seem to be the painfully slow process of building a new "downtown Buffalo." You have lived through the noise and inconvenience of urban redevelopment. I am certain that there are others here today who return but occasionally and who share the bewilderment and occasional dismay which accompanies the futile search for old familiar landmarks. At times we might even speculate on some of the seeming incongruities (I hesitate to imply cultural trend) such as the razing of the Erlanger Theater and the retention of the Palace Theater.

Urban redevelopment is changing the face and the pace of urban America. Advances in technology are changing the complexion and way of life in rural America. There is little, if anything in your life or in mine which is changeless and so it is not surprising to find that the current of our lives, the rationale for this conference is recognition of the changing scene of the patterns of health care and health education throughout our Nation. Names like Flexner, Berry, Darley, Dwyer, Coggeshall become professional "household" words. As we discuss their concepts and ideas we, too, become involved in the changing times not as victims, not as passive observers, but as contributors and innovators convinced that change needs purpose, guidance, direction and evaluation.

Not too many years ago, I attended the University of Buffalo. There under Dr. Milton Albrecht in the Department of Sociology then with Dr. Dorothy Lynn at the Graduate School of Social Work and still later with Dr. Stephen Abrahamson in the Graduate School of Education, I gradually learned of the errors inherent in making unwarranted assumptions.

During the past several years, as I worked with the challenges in medical education, I really began to appreciate the wisdom of their guidance. Consequently, I will not make the "unwarranted assumption" that you are all completely (and equally) familiar with Public Law 89-239, the Regional Medical Program legislation. Those who know the program will bear with me, I am sure, during this brief review of the legislation.

The impetus for the Regional Medical Programs was contained in the President's 1964 Special Health Message to Congress. In the message he proposed to establish a Commission on Heart Disease, Cancer and Stroke and included as part of the specific charge that they were ". . . to recommend steps to reduce the incidence of these diseases through new knowledge and the more complete utilization of the medical knowledge we already have." A commission of distinguished physicians, scientists, and informed citizens was appointed to accomplish this task. Of the many significant issues covered by this Commission in its report, the following points came ringing through in major tones: "Our Nation's resources for health are *relatively untapped*. The rising tide of biomedical research has already doubled and redoubled our store of knowledge about heart disease, cancer and stroke . . . yet for every breakthrough, there *must* be a *followthrough*. Many of our scientific triumphs have been hollow victories for most of the people who could benefit from them."

We could spend many fruitful hours discussing the implications of these quoted statements and find therein the rationale for the Regional Medical Program and, indeed, for *this* important conference. The major recommendations of the Commission form the baselines of the Regional Medical Program as authorized by Public Law 89-239.

The architects of the legislation extracted from the Commission report and from the content of subsequent hearings several basic premises which, of themselves, placed this exciting and disarmingly simple legislation on a practical and exceedingly rational footing.

These premises are:

1. The program will *utilize* and will *build* upon existing institutions and manpower resources.
2. The active participation of practicing physicians and other health professionals is *essential* to the success of all regional medical programs.
3. The purpose can best be achieved through initiative, planning and implementation at the Regional level and in terms of the needs identified in each proposing region.
4. Cooperation among all health resources in a region is an essential ingredient in responding to the challenges posed by the dynamic advances of medical science. A program which serves the interests of a single category, institution, or organization cannot possibly achieve the objectives of the Act nor overcome the caveats of fragmentation and insularity.
5. In order to establish an effective linkage between research

advances and improved patient care, it is desirable to establish a continuing relationship among the research and teaching environment of the medical center, the patient care activities involving the community hospital, and the practicing health professional. A basic premise of the Act is the desirability of extending these productive interrelationships familiar to large medical centers to additional hospitals and to all health professionals through the establishment of regional cooperative arrangements.

6. These purposes should be accomplished without interfering with established patterns of professional practice or of hospital administration and without the financing of patient care beyond those patient care costs incident to research, training and demonstration activities supported by the Act.
7. The development of the full capabilities of a regional medical program will take several years. In recognition of this, the legislation looks to a planning phase of varying length for each region out of which the operational phase will emerge on a foundation of mutual learning and interaction of *all* health forces within a region.
8. Success in implementing the Regional Medical Program and the opportunities thus afforded will be directly proportionate to the intensity of the cooperative arrangements thus established among all health professionals within a region.

Each of *these* premises might well provide the content for many hours of discussion but, in the aggregate, they provide the opportunities for making new decisions and guidelines for action in bringing better patient care to all who require it.

The first Regional Medical Program planning grants became effective on July 1, 1966. As of this date, thirty-eight planning grants representing 80% of our Nation's population, have been received and approved. It is fully expected that about 53 planning grants will ultimately represent a 100% coverage of our Nation's population. Four regions have been awarded Operational grants, (Albany, Missouri, Kansas and Intermountain) and several others are in the review process at the present time.

I would not want the "labels" to mislead by erroneously identifying pre-existing boundaries of the city or state variety. Rather, Regional boundaries are established with or without regard for the traditional "state lines"; they are selected by the respective Regional Advisory Groups on the basis of self-established criteria. Some of these criteria are patient referral patterns; patient flow patterns; the source to which the health professional turns for information, education and consultation; geography; transportation; and other economic factors. The sphere of influence is regionally determined, as are the particulars of each proposal.

Were you to review a sample of the proposals received to date, I am certain that you would be impressed with the variety of approaches emerging from this program. The characteristics and content of the applications are as varied as are the several regions within which they were developed. As might be expected, some of the regions "lead from strength," others concentrate in areas where a reasonable balance exists between need and available health manpower. Other regions are concentrating on the areas of greatest need. Almost all of them include programs in continuing education for physicians and for other health professionals.

This emphasis on continuing education by the Regional Medical Programs, however, should be found in a concept of continuing education which includes the ultimate goal of improved patient care. It is foolish to suggest that continuing education appears on patients' charts or is listed under therapeutic procedures in heart disease, cancer, stroke or related diseases. But it does form a vital link in the "research-to-practice sequence" since it is recognized as one of the primary vehicles or systems of information-transport available to us.

Further, recognition must be given to inclusion of *all* health professionals as a vitally necessary approach. It would be a major flaw in the action plans and dramatically impede progress toward the ultimate goals if continuing education efforts were to concentrate on (and thereby improve) the knowledge status of one segment of the professional team and leave untouched the other critical members. The Division of Regional Medical Programs is, therefore, vitally interested in continuing education for *all* health professionals. But, interest alone is not sufficient to carry the "message to Garcia." Regional Medical Program philosophy adheres firmly to the premise that each region is responsible for the direction of its own programs . . . each region must of necessity be self-motivating. The focus of action, is in your bailiwick.

The Regional Medical Program proposals reviewed to date reveal a substantial and encouraging interest and activity in continuing education in the allied health field. Other Federal, local and privately sponsored programs serve to increase the magnitude and importance of this vital area of interest. I would point to several examples of this in the Regional Medical Program setting:

1. Public Law 89-239 specifies that an applicant . . . must designate a Regional Advisory Group . . . This Advisory Group is to provide overall advice, encouragement and guidance to the grantee in the planning and operational programs, in cooperative arrangements and in a continuing review of progress toward the major goals of the program. Its composition must include, among others, practicing physicians, medical center officials, hospital administrators, appropriate medical societies, voluntary health agencies and *other health professions.* To quote the title of an old TV program, "*You Are There.*"
2. Many of the planning and operational applications received to date include proposals for continuing education in nursing, physical therapy, occupational therapy, inhalation therapy, medical technology, and many other health professions whose contributions to patient care in these diseases is an established value.

Your Regional Advisory Group cannot possibly be all things to all health professions, nor can it be expected that every health profession will be represented by way of a "chair" on the Regional Advisory Group. But, to the extent that your profession contributes to patient care in heart disease, cancer, stroke and related disease, inclusion in the Regional Medical Program *can* become a reality. Addressing ourselves to the issue of continuing education in the health professions, I would suggest that you will find members of the Regional Advisory Group and your Regional Coordinator most receptive to your inquiries about the program and the opportunities for the inclusion of your professional group. May I suggest the following steps as one possible approach:

First: As a group or committee effort, identify the pertinent continuing education activities already in progress in the discipline. Give the efforts greater visibility as well as moral support through total participation. While Regional Medical Program funds are designed to augment, not to replace, existing efforts supported by other Government agencies or private foundations, existing efforts will probably *not* be expanded without evidence —from your profession—that need for expansion exists. Regional Medical Programs can aid in this expansion and can help to establish new programs of Continuing Education.

Second: Identify the members of the Regional Advisory Group and/or the Coordinator and ask to review with them the boundaries of the region, the planning proposal submitted or in the forming stages and the actual or planned operational proposals to determine the extent to which *your* profession's continuing education needs are considered.

Third: Having determined the needs and having identified the level to which the region's proposals address itself to satisfying these needs, draw-up a plan of action which, to best available knowledge, will contribute to the satisfaction of the *unmet* needs. Present a suggested format to the coordinator for inclusion in the original or in supplemental RMP proposals. This procedure will, undoubtedly, be that of presenting your group's proposal to the local regional advisory group for their studied consideration and action. The suggestion thus presented to the regional coordinator should be carefully structured and sufficiently explicit as to stimulate professional dialogue. Suggested course or courses of action should contain evidence of need; a statement of current activities; clear-cut objectives; a viable evaluation format; and some indication of how these efforts will add to existing cooperative arrangements and contribute to the goals of the regional efforts to improve patient care in heart disease, cancer, stroke, and related diseases.

You will note that I have not suggested that you contact the Division of Regional Medical Programs group in Bethesda. Since the Regional Medical Program is based on *regional* initiative, *regional* planning, and *regional* implementation through cooperative arrangements, it is to your advantage to work with . . . to become a part of . . . the region in which you are located. I would hasten to add that the Bethesda staff, the Review Committee and the National Advisory Group are vitally interested in your involvement, in your continuing education needs and efforts, but the active inclusion in a Regional Medical Program must take place at the regional level through the officially designated coordinator and Regional Advisory Group.

I hope that I have given you some food for thought with this brief overview of the Regional Medical Program legislation. But even more, I appreciate this opportunity to suggest a course of action which, I trust, will aid you in satisfying your profession's needs for continuing education through your Regional Medical Programs.

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The Allied Health Professions - - At The Flood Tide of Opportunity

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Those who are concerned with serving others in the field of health have an unparalleled opportunity to create new and better patterns for health care. The emerging occupations in the fields related to health are confronted with the confluence of many streams of change—strong social forces that are being exerted to modify the familiar and customary means of health care. These familiar means are no longer sufficient to provide the quality of care in the quantity now expected by members of our society.

The ferment discernible in hospitals, in public and private health organizations, in medical and other health-oriented schools,

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Introduced by: Mr. Richard S. Dingle, Director for Health Affairs Planning, State University of New York, Albany among professional groups and patients demonstrates that no segment of American society is fully prepared to cope with the vast changes of recent years. The urgent need for more people, possessing great skill and dedicated to the care of those who are sick has become evident.

Those who teach and work in the allied health professions are presented with an exciting chance to serve their fellow man—to step into the existing gap between advancing medical knowledge and needed health care. Fortunately, these people will be prepared to fill this gap by schools such as the one dedicated yesterday.

Unfettered by the bounds of tradition that surround the older health disciplines, educators and practitioners in allied health have the freedom to shape new roles and interrelationships.

"Allied" implies interrelationships. These interrelationships should give direction to all discussions, planning, and development and implementation of the allied health professions. This fundamental concept will help us to meet the health-care expectations of the people of our Nation, to achieve the most effective use of health-care skills, and to preserve and advance the dignity of individual human beings.

Each of us must rededicate himself to the care of people in its fullest sense. Those who do not provide direct services to people must recognize that individuals are the ultimate recipients of their professional energies. This is true of educators, medical record librarians, hospital housekeeping personnel, and the Federal bureaucrat, as well as a long list of others.

The preservation of individual human dignity is the ultimate aim of health services. To attain this goal we must see ourselves and the services that we have been prepared—or are being prepared—to provide, as a part of the whole. The individual desiring to stay well—or the person who is ill, is our ultimate reason for being, not our own specialties nor our own convenience.

Realization of this aim in a highly technical and diverse society presents problems of enormous magnitude to all who are engaged in providing and planning for health services. The economic capabilities of society and its expectations far exceed those of the professionals in the health field and of the existing organizations that have evolved to provide health services to those who need them.

Only by relating the efforts of those who provide health care can the breadth of knowledge, the variety of skills, and the necessary energy be developed to provide comprehensive, modern health services.

The models of contemporary medical education arose in the late nineteenth and early twentieth centuries. Few, if any, fundamental changes have occurred in the organization of departments and courses of study since that time, although course content and the conduct of research have changed dramatically. The ways in which health services are now provided are extensions of systems that are considerably older than medical education. These have been modified only to reflect the increased importance of the hospital as the workshop of the physician.

The impact of the social and scientific changes is most noticeable in hospitals at the moment, but it is rapidly extending to all aspects of medical and health-oriented education. The health-related schools that will excel in the future are those that will not only develop new scientific knowledge; they will also examine all aspects of their organization and program, revise or devise additional ways to make full use of their clinical resources and patient-care responsibilities. They will recognize the socio-economic and environmental factors in health care. They will explore ways of organizing their resources to provide the most effective health services possible. Education and research will have to extend beyond the traditional in-patient hospital base.

Major developments in health care during the next decade will be concentrated in the distribution of health services. Focus upon this issue will profoundly affect the organization of all health care organizations, including schools. Effective distribution of health services will involve large numbers of people in the health fields to study, teach, and provide health care. New types of skilled people will emerge. There will be greater numbers of health professions than now exist.

The primary institutions upon which we will rely for the ideas and for the demonstrations of new health-care patterns as well as for the preparation of people trained to advance the development of health services will be the colleges and universities. These institutions will also become the major contributors to the study and integration of social organization, business and administrative methods, economic and educational theory and practice—especially as these considerations affect the optimal provision of comprehensive health services.

Teachers in the health professions are scarce. We need to encourage more people to enter this field and to support their advanced training. It is also essential that qualified students have the resources to enter and to complete an education in the health field. No economic barrier should keep able students from becoming important contributors to the health of others.

In the area of curriculum development schools of the health related professions should make continuing contributions to content and programs so that the most competent health workers are prepared. Effective cores of education should be developed to insure basic competencies as well as to prepare health workers to assume new tasks as health needs and the means of meeting these needs change. Opportunities for advancement for health workers are essential not only to retain present personnel but also to attract others into the field. In the past, education for the health professions has been marked by a rigidity which implies that knowledge gained in education for one area of health care is not relevant nor acceptable for another.

Skillful, dedicated people, given the opportunity to serve the sick, must be encouraged to enter and to advance in the health field. They must work in settings that allow them to use their abilities effectively. They must be recognized for the significance and essentiality of their contributions.

Provision of health services of the highest quality for the people of an entire nation is a prodigious undertaking. It will require the energies of all who are now involved in research, education, and service in the fields related to health. It will require understanding on the part of public and private, Federal, State and local organizations, institutions and agencies which are involved in the health of each of us. If we are to succeed, new relationships and new responsibilities, clearly stated and unselfishly developed, will be essential. Certain Federal responsibilities and relationships have already been established by the Congress and by the executive branch of the government. The responsibilities of the Bureau of Health Manpower are concerned primarily with enabling capable people to undertake health careers through the support of individuals during their period of formal education, the support of programs in the institutions in which they receive their education, and the support of facilities which are required for learning and teaching. The provisions of the Allied Health Professions Personnel Training Act of 1966 exemplify the ways in which the Federal government can help in the fulfillment of the responsibilities for health in which we all share.

The Act is intended to increase the number of qualified people in the Allied Health Professions who contribute most directly to patient care. Programs for grants are being developed in accordance with the provisions of the Act. They will be undertaken as funds are made available by the Congress.

Of greatest importance to all endeavor in the allied health professions is the preparation of able teachers on whom the future depends. Traineeships are therefore provided for individuals to obtain advanced education so that they may serve as teachers in allied health specialties. Without these teachers, buildings cannot be used and students cannot be encouraged to learn.

The schools—that is, the junior colleges, colleges and universities—which provide the environment and opportunity for education in the allied health professions also require resources so that their teaching programs may be strong and well balanced. Grants will be made to these institutions for improvement of their educational programs. These grants are one of two types — basic improvement grants, which are allocated to eligible schools in accordance with a formula specified in the law, and grants for special programs to institutions that will enable them to expand their educational programs to develop an organized school of the allied health professions offering curricula in three or more fields.

A most significant program, now being developed, will provide grants to support studies, demonstrations, and evaluation of the training of new types of allied health personnel as well as new approaches to the preparation of people undertaking careers in the existing disciplines of the allied health professions. These grants will assist schools in meeting the needs created by health knowledge and technology and by the increasing public expectation for health services of high quality.

Although funds are not available currently to support grants for construction, the importance of providing and expanding facilities appropriate to education in the allied health professions is evident, and the need is clear. We fully expect that funds will be made available to expand the capacity of existing schools, to create new schools, and to improve the quality of educational programs. With the exception of the grants for basic educational improvement, all grants will be awarded on the basis of competitive review.

Many technological changes, which will alter the patterns of patient care and control of the environment, are now with us or on the horizon. Among these are changes in hospital information systems, automation of laboratory procedures, development of new and refinement of existing diagnostic and therapeutic procedures, new ways of organizing and delivering supplies and services, and improvement in the structural design and management of all health facilities. These changes will occur at an increasing rate, making great demands for skills on those who are responsible for their management and for carrying out the procedure necessary for the preservation of health, the prevention of illness, and the care of those who suffer from disease. Not only will these changes require constant review and alteration of teaching programs; they will also place great responsibility on those who work in the health fields to continue their education to acquire new knowledge and techniques. This responsibility is fundamentally a personal one and stems from the individual's desire to learn and to achieve his full potential.

It should be acknowledged and accepted that greater support of education in the health professions is a public responsibility. The limitations now evident in the provision of health care that are imposed by inadequate numbers of well-prepared people will become greater in the next decade. It is essential that support to institutions engaged in health education be forthcoming from all parts of our society. Otherwise people will not benefit from the knowledge now ready to be applied. This support should encourage a diversity of educational programs and should allow as much freedom as possible to the various institutions to develop individual programs. If health research and education are to remain viable and balanced with commitments to health services, the volume and diversity of medical knowledge and social need demand a variety of programs and people.

To attract the people we need in the health field, we must acquaint young people with the many and varied opportunities that exist. We must also make these opportunities a source of great personal satisfaction with adequate compensation for their services. Those who work in the health fields—particularly nurses, technicians, and those who provide the general services upon which health care depends—should not subsidize health services by working longer hours for lower wages than members of most other occupations.

An increase in our medical capability requires the participation of many kinds of professionally and technically educated people and depends upon the available socio-economic resources. In the final analysis, the limits of health care are defined by the proposition of total productivity and manpower that society commits to health and the means, public and private, by which the commitment is met.

In this Nation the distribution of health services has never been uniform. The differing densities of population and resources —as reflected in the different health problems of our growing cities and diminishing rural areas—have contributed to piecemeal solutions. Voluntary systems of health services have tended to deal with the problems of acute illness or specific disease entities having strong emotional appeal. Public systems—whether local, State, or Federal—have dealt with whole populations in the area of preventive medicine. They have concerned themselves largely with indigent groups or with severely or terminally ill patients when they have provided individual patient care.

In the next decade the flood of knowledge and expectation of people for health services will require new definitions of the relationships of schools in the health and allied health professions, public and private health agencies, and in institutions and the community to plan in concert for the health needs of individual men, women, and children. This great tide will require that we embark upon an improved course in all aspects of health—delivery of health care to all who need it, prevention as well as cure or relief of suffering, and the wisest use of what are always limited resources. Our success will depend on the preparation of people to meet their tasks, their dedication to those tasks, and on a sense of responsible and generous commitment to serving those who depend on them for their good health.

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The Challenge To Education For The Health Professions In Meeting The Health Needs of Society

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The theme of this talk is education; however, before I consider the education component of preparing individuals for the health fields, it is of utmost importance that first the scene be set in which this education takes place. Within this milieu, I will discuss briefly the forces in our society influencing educational programs for health personnel. The expectations of our society will also be cited. From this setting, I will move to the educational component, illustrating the role of education in meeting current demands for health manpower. I will spend the greatest portion, however, indicating the challenges to education if the needs of society, in relation to health services, are to be met.

As far as health care, or the delivery of health services is concerned, our American society can best be described as being involved in a revolution of rising expectations. We have learned to demand the best from our health personnel, and we have learned to expect it when we want it, not necessarily when we need it.

While as individuals we have grown accustomed to disagreeing on a number of issues, when it comes to health there is uni-

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Introduced by: Lawrence A. Cappiello, H.S.D., Assistant to the Executive Vice President, State University of New York at Buffalo versal agreement—we all want it! Health care, like universal education, has emerged in modern society as a primary value to be secured as a common need. However, numerous forces have caused a change in our society that make it difficult to achieve this common need. A highly mobile society, rising population, urbanization, and an increase in the portion of our population requiring psychiatric, pediatric, and geriatric care are but a few of the forces that add to the difficulty of achieving this common need. In spite of all the problems, forces and counterforces acting on our society, we still expect—as a matter of fact, demand—the best in medical service. As we receive more and better service, we continue to demand even better results. Perhaps this is what has made us such a viable culture; our rising expectations have always been met. They have been met because we have insisted that the needs of society be satisfied and we have been able to satisfy those needs because of one tremendous resource—a reservoir of manpower.

If the common need of health services is to be achieved, it will require two things; (1) an increase in the pool of health manpower, and (2) more effective and efficient use of available personnel. Health services can be provided only if there are individuals to deliver that service and the service is delivered efficiently. As of today we must face the fact that our pool of health personnel is far from what we need to meet our health needs, and the manner in which they are used is grossly inefficient.

You have already heard a great deal about the health manpower shortage. A vast array of statistics are available to support the need for more personnel.

These shortages are further compounded by the maldistribution of health personnel. The urbanization that I mentioned earlier has raised havoc with the distribution of health manpower; it seems that everyone wants to live and work in urban areas. Another example of the maldistribution can be seen by looking at geographic areas. The ratio of health personnel to population is 20 percent higher in the Northeast than the national average, yet that region reports unmet needs.

So here is our present situation—steadily rising expectations of society in terms of delivery of health services; a limited pool of health manpower personnel to deliver that service; and, inefficient use of existing resources. The answer no longer is a matter of simply increasing the number of health personnel, for now other occupational fields are also tapping into the manpower reservoir (the health fields, by the way, are not the only ones faced with current and projected shortages). Therefore, it appears as if education, in its broadest sense, will have to rise to the challenge and meet the increasing expectations of society. It has already begun to meet this challenge, but it is treading its way with its usual caution. I will now illustrate how this challenge can and is being met.

First and foremost, the total pool of educated manpower must be increased. It is to no avail discussing health manpower unless there is a resource, an educated resource, from which health personnel can be recruited. Except for the lowest echelon of health workers, one of the unique features of the health field is that its personnel receive "advanced" training and education. Therefore, usually a basic education of at least a twelfth grade is essential prior to undertaking a health career. Of course, for medicine, dentistry, pharmacy, physical therapy and some other disciplines, higher education prerequisites are established, thereby further compounding the problem.

Here, then, education must meet its first challenge—creating a pool of minimally educated manpower from which not only the health fields but other occupations as well can draw. This challenge is being met—but not rapidly enough—by various local, State, and national efforts in providing a compulsory, quality, minimal education for all who are capable of achieving it. With this basic education as a foundation, the health occupations can draw its resources and prepare its personnel for the myriad of jobs that are classified under health.

The development of a pool of educated manpower cannot be overemphasized. The strength of any nation is proportionally related to its educated manpower resources. We can point to modern Israel, which in a matter of years of its formation, became one of the most highly developed countries of the world—it possessed a built-in educated manpower resource on which to draw for its strength.

With an adequate supply of educated individuals, the second challenge to education can be, and is being presented—the development and education of new levels of health personnel. Numerous studies have been completed and document the fact that physicians', dentists', and nurses' time is inefficiently spent. A recent study claims that approximately 70 percent of the so-called professional duties of a pediatrician could be handled by a lesser trained individual. Physicians, dentists, nurses, physical therapists and many others receive a quality, highly sophisticated, professional and scientific education, and then are required to perform duties that could be accomplished—and probably better—by lesser trained individuals. The answer to this dilemma is in the hands of education, for education can develop programs geared to producing new levels of health personnel capable of performing duties, and performing them competently, that were previously, by tradition, ascribed to the established professionals. What is needed are new levels of professionals and sub-professionals.

The problems associated with creating new levels of health personnel are formidable indeed. Professional prerogatives, suspicion, jealousy, mistrust, probably even the right of primogeniture, coupled with public apprehension are obstacles to be faced before such educational programs become a universal reality. Fortunately, the winds of change are already blowing a fresh breeze in this direction. A number of professional groups have recognized that current shortages will not be decreased appreciably in the immediate future; consequently, alternatives will have to be found. Isolated endeavors to train new levels of health personnel are already taking place in various parts of the country; the physician assistant, the orthopedic assistant, the pediatric assistant, the nurse-midwife, the child health-care specialist all are present realities. Admittedly, they are isolated experiments, but from these singular efforts more universal applications should develop. Already, proposals are being made to create so-called medical practitioners, psychiatric assistants, and surgical assistants. As new proposals are made, education will indeed be faced with a series of challenges. Each new proposal will require a distinct educational program that will first need to be initiated; second, implemented; and third, tested. This will require educational institutions and facilities with vision and courage, willing to experiment and prepared to accept their share of criticism.

As the feasibility of each program is established, educational institutions will have to tool-up to meet the challenge. It will necessitate recruiting faculty, providing space, developing a new educational technology, recruiting students, and changing existing prejudices, each item in itself reason enough to give an educator an ulcer. And yet, this is a realistic challenge; it is no use denying that it will not come about. It is already here and a number of forward-looking institutions are accepting the challenge.

An integral part of creating new levels of health personnel is the need for some fresh thinking on what has been called lateral and upward career mobility. Here is a challenge worthy of education. At present, once an individual elects a specific health career, he is locked into that career. Almost all the health careers are terminal. The only mobility that occurs is the assignment of more responsibility in that specific career. For example, the registered nurse may be promoted to a nurse supervisor, but she will still be a nurse. At least for the registered nurse, her additional responsibility will be compensated by a salary increase. But what if the nurse decides to make a lateral move, that is, decides that she wants to become, say, a physical therapist? At present she cannot receive any credit for her past nursing education or experience and would have to start at the very beginning in a school of physical therapy.

The case of the practical nurse is even worse. Practical nurses receive one year of intensive post high school education and on the wards, if not for the uniforms (the professional status symbols) it is often difficult to distinguish between the practical nurse and the registered nurse—the demarcation between their levels of responsibility is cloudy. If a practical nurse after several years of experience decides that she wants to become a registered nurse, there is only one avenue open for her to achieve this goal—enroll in a school of nursing and start from scratch. She would receive no advanced credit for past education or experience; the guild is closed and the novitiate must go through all the prescribed initiation rites. If the editorial by Dean Schlotfeldt, of Western Reserve School of Nursing, is any indication of the change coming about in the thinking of nurse educators on the subject of upward mobility, then the picture is finally brightening.

I do not, however, want to point an accusing finger at nursing only. The health occupations, because of their insurmountable barriers to upward and lateral mobility, present the distaff side of their professionalism. With a little effort, the health occupations could provide the gifted and able student and practitioner unlimited opportunities to move up the career ladder. I am enough of a pragmatist to realize that this will be a difficult task to accomplish, but also enough of an idealist to hope that the health occupations can bring it about.

As new levels of health personnel are created, all educational programs will have to build within them some opportunity for relatively easy lateral and upward mobility. The present educational system is an anachronism; you cannot from one side of your mouth decry the inability to attract competent people into the health professions, and from the other side expound the virtues of a closed professional society.

Developing programs that will allow for such lateral and upward mobility will tax the genius of educators. Yet it is just these kinds of apparently insurmountable obstacles that education has been able to overcome. Here is a challenge truly worthy of education; a challenge that must be met if we are to satisfy the health needs of society.

Interwoven within the fabric of all these problems and dilemmas lies another challenge to education for the health occupations —graduating health personnel with greater efficiency and still greater ability. Education has always prided itself on its ability to develop new and more efficient methods in educating students. Unfortunately, the claims of education often exceed its tangible accomplishments. In all fairness, education should not be blamed for its failure to deliver occasionally the goods it so highly touts. In order to make the resources of education functional requires that teachers implement these resources. Sad to say that teachers in the health occupations—occupations noted for their scientific daring—often are reluctant to be innovative. I am sure few scientists today still subscribe to the practice of using leeches as a means of therapeutic blood letting, but in our classrooms the teaching techniques used thirty years ago often still hold forth. This is not intended to depreciate all traditional methods, for some have repeatedly proven their worth. Why, to convey to you information, and express my ideas and concepts on education for the health occupations, I have resorted to the most traditional of all approaches, the lecture, which even today, although it has been abused and maligned, remains an effective teaching technique. What I am pleading for is an open mind in exploring more efficient ways to educate health personnel.

To meet this challenge—graduating students with greater efficiency and greater ability—education for the health occupations must introduce some sound educational principles into its thinking. As a bare minimum, I should like to suggest the following:

The objectives of each educational program must be clearly delineated. As new levels of health personnel are created, in turn the educational objectives for each program must be spelled out. This is a crucial first ingredient, for based on the objectives the content of each program will be determined, the appropriate teaching methodology selected, and student achievement judged. The objectives, however, cannot become static; they must continuously be subject to close scrutiny. For as the discipline changes, so must the educational objectives.

Dependent on the objectives is the subject matter content of each educational program. One of the real tragedies in education for the health occupations is that new content is always being added, but little, if any, is being deleted. What is needed is a fresh look at this entire problem. If the educational process is to become more efficient, educators will have to determine *the minimal basic core of knowledge that each student will require to become a competent functioning practitioner of his discipline.* Judgments will have to be made, new material will have to be added, a great deal of irrelevant material discarded, and all this material will have to be integrated and correlated in a systematic and logical manner. This basic core will depend on the educational objectives, and like the objectives be subject to constant critical evaluation. Scientific knowledge will continue to grow; however, decisions will have to be made as to which should be added to the core. They will be difficult decisions but necessary ones if the length of time to be spent in preparing for a health occupation is to be kept at a minimum. By keeping the content down to the essential minimum, it will be possible to get the graduate out as a practitioner as soon as safely possible.

Some eyebrows may be raised on this subject of a minimum core. The argument is made that the health fields are dynamic because of the continuous input of new scientific information. Yet, everyone knowledgeable on this subject willingly concedes that no matter what the duration of an educational program, or what amount of scientific data is crammed into it, no student (nor the most renowned teacher) will ever know all there is to know about his discipline. Not only is a basic core a logical alternative, but because of the continuous input of new data, students must realize early in their careers that learning is a life-long process. They must appreciate the need to keep informed on developments in their discipline. Students will have to develop the skill to learn on their own, for if the concept of self-learning is imbued in them during their formal education it will continue when they are on their own, away from the probing eyes of their teachers.

Educational technology has taken tremendous strides in developing self-learning techniques. We have programmed texts, teaching machines, resource units, single concept films, video tapes, synchronized video-audio techniques, computer assisted instruction, auto-tutorial laboratories, and finally programmed examinations that allow the learner to judge quickly and easily his own performance. If all of the self-learning techniques already available were placed in one room, it would represent an accomplished fact far beyond any Orwellian day dream.

All of these self-learning techniques have been tested and retested. Any one who has made extensive use of any one device subscribes to its utility, and yet, in the educational programs for the health occupations little use has been made of these devices. With self-learning as a desirable educational goal, and the realization that there will continue to be a shortage of qualified teachers, far greater use of the artifacts of educational technology will have to be made.

Finally, while on the subject of educational technology, it, too, must be prepared to meet a rapidly developing challenge: The live patient has always remained one of the primary teaching-learning resources for students in the health fields, but as the number of students increases in all occupations, the number of patients willing to be used for teaching-learning purposes will not proportionately increase. There is only one answer, and that is the development of patient-model simulators, mechanical models that will be able to simulate anatomical and physiological entities. Students will first have to develop their skills on these models before they come in contact with patients. For those disciplines lower in the hierarchy of the health professions, such models appear essential. I realize this appears like a visionary pipe dream, but already prototypes of these patient-models are a reality and functioning far beyond the expectations of their severest skeptics.

I said earlier that meeting the health needs of society will depend on an extended pool of well-trained health personnel and more efficient use of that personnel. Here, then, lies the last challenge—conducting research on patient care. The health professions must now consider it their responsibility to initiate studies on how health services can be improved. Faculty must look on this type of research as an activity as legitimate as laboratory and clinical investigations. Students will have to develop an appreciation and skill in conducting patient care research so that when they become practitioners, they can be instrumental in increasing the patient care output of professionals and auxiliaries. This will mean, of course, that the educational programs will have to provide, for interested and able students, experiences that will allow them to develop needed skills. For those students not so inclined, at least an appreciation for the need and results of research on patient care will have to be developed. Students will have to learn that it is not enough to do your job, but to do it in the most efficient and economical manner. Students and faculty will have to broaden their horizons; they will have to become community oriented; they will have to look at a patient not only in terms of the aseptic atmosphere of a hospital, but the patient in terms of his entire environment. A fresh approach to education will have to be developed.

These then are some of the challenges facing education so that the health needs of society can be delivered by competent health personnel. Some of the challenges have been met, others are being critically studied. There will continue to be problems in meeting these challenges—complacency, lethargy, provincialism, tunnel vision, and plain stubborness. Yet in my unshaken idealism, I am confident that all of these problems will ultimately be surmounted and the challenges met. Education and educators will, as they always have in the past, be responsive to the rising expectations of society. Our unbounding faith in education is well placed.

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Educating For The Helping Professions: An Underview

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Dr. Rosinski, who spoke previously, seems to have delivered the address that I was going to deliver, that is, "Educating for the Helping Professions: An Overview." So I've decided that I would have to improvise, and if anyone saw me at the table, I was writing furiously after the dessert. At first, I thought I would take a real "overview," that is, get on top of the position that Dr. Rosinski took. But, I decided that the visibility of the world below would then be so rarified, so dim, that I would not be able to see very much. So I decided to change the title of my remarks to "Educating for the Helping Professions: *An Underview.*"

As you recall, Dr. Rosinski spoke about a pool of well-trained personnel which would have to provide the resources for the new professions needed to respond to the health needs in what has been described as "the revolution of rising expectations." He also referred to the fact that anyone in the "old" professions recognizes that there must be a rationalization of the time, functions, and activities of the profession so that people can effectively do what they've been educated to do. We all know of the ways in which talent is underused and overworked, and certainly this is one of the things we must address ourselves to. He spoke also of the need for openness, for lateral and upward mobility in the health

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Introduced by: Marvin L. Bloom, M.D., Director, Health Sciences Continuing Education, State University of New York at Buffalo professions, and for new ways of educating these professions to provide the basis for self-learning and continuing education. In doing this, he placed heavy responsibility on the universities to provide research in health care, and he spoke of the need for the universities to relate to the larger communities. That was the address, as I said, I was going to give, and he did it very well.

In taking an underview, however, I would like to speak about the real bases of "the revolution of rising expectations," and that is, poverty and race. The term "revolution of rising expectations" was first used in connection with underdeveloped countries. It applies as well here, where we live in a mixed-developed country in which, at a recent conference on comprehensive medical care, I learned things which I should have known, which perhaps all of us should know. For example, that there are counties in Mississippi where the infant mortality rate is higher than in Ghana or Nigeria. Or, that there are sections in the large cities of the United States, in the Northeast, where the availability of medical care is just as poor in many ways, because of sociological factors, as in Mississippi or parts of underdeveloped countries.

I would like to speak of educating for the helping professions from that underview which is the real thrust of all of our concerns, whether we recognize it or not, and that is from a revolution which aspires toward a social recognition of newly discovered expectations among those who have not shared in any real way in the community in which we live. In a sense, this requires a revolution sensibility among the helping professionals who must provide the bridge between the community and the large alienated body of people living in poverty.

I've entitled my talk "Educating for the *Helping* Professions" because I do not think it wise to consider the health professions as an isolated group of professions. I think the health professions must be looked upon as one of a large spectrum of professions which is providing *help* in a wide range of ways and on various levels. To discuss help in any kind of meaningful way we are always faced with the problem of identifying the kinds of help the people want, or need, or recognize; and anyone who has been out in the community, and I think most of you have, probably much more than I have, is aware that you cannot identify a single problem and identify the solvent of that problem in isolation, and assign it to a single profession. Just as the problems are complex, comprehensive and inter-related so must the professions dealing with any one problem. At the conference on comprehensive medical care I referred to before, it was a revelation to see the degree to which the physicians had to become sociologists and the nurses had to become social workers and the social workers had to become nurses. The lines between the professions, in a sense, are being erased, and new professions forming, all in response to those problems that cast us in a helping role. It is within that spectrum and mission that I see the manpower problems of the health professions.

Now I'd like to address myself particularly to this "underview" as I call it, and speak of what I call the necessity, in educating for the helping professions, of changing the attitudes of the professionals who will be playing the helping roles. This requires some basic changes which we ourselves, in a sense, must subject ourselves to—we must, in our educational programs, bring forth a generation of helping professionals who will have new attitudes, a new sense of their relatedness to the other professions, to the social problems which define the context in which they work, and, most important, to the people they help.

We live with a legacy of a nineteenth century model of the helping profession, and that is the medical profession. This model is essentially that of the upperclass or upper middle-class professional who performs certain services for people intelligent enough to come to him and pay him but relatively ignorant or, if not ignorant, then kept in ignorance by a kind of professional secretiveness or snobbery. It is a model that also defines the status of the physician and how he relates to his co-workers—nurses, midwives, medical aides—as that of a captain to privates, or at best, corporals. This model for the helping professions is really an impossible one in the twentieth century. There are many reasons for the impossibility, the main reason being that the revolution of rising expectations is tied up with a revolution in almost every area of our lives. For example, we have a new impulse toward real equality. We can no longer think of the person helped as inferior. The physician can no more be the benevolent master than, during the middle ages, he was a servant, or in Greece, a slave. To be more specific, I think that we are going through a revolution in terms of attitudes toward women as this, perforce, will have a great impact not only on manpower utilization and the organization of the professions, but on the social "feel" for the helping role of the professional. I do not see how we can any longer conceive of the woman's role in the professions as an inferior one, as I think we did in the nineteenth century. There are, of course, a multiplicity of things to do, each requiring different training, more or less extensive or intensive. What we must recognize is that these activities are to be performed by people who are not inferior or superior, but who simply do different things. In other words, we must not carry over social value judgments. The physician, the nurse, the social worker do different things, and they should do their different things as best they can and be trained to a self-respect in doing those things so that they can participate in the helping world, so to speak, in the best way they can.

Now, how are some of these attitudes going to be developed? I'd like to consider a number of ways. As I've already suggested, implicit in the attitude of the nineteenth century professional was that he considered himself the repository of all knowledge in a certain field as *against* another person, the patient, for example, who bore a ward relationship toward him. Modern psychiatry in many ways has helped us understand that the person in need of help has got to come for help to be helped. In a sense he must contribute, perhaps become an equal participant in the therapeutic process. Thus, as a first objective in changing attitudes we must learn to recognize the participatory contribution of the person helped not only individually, but as a member of the community. In the poverty program this recognition was early seen to be an essential condition to the success of many efforts.

Another way in which I think we must educate for a change of attitudes is in the conception of what the unit cared for is. The previous model, the nineteenth century model, was essentially a physician-patient, one-to-one relationship. Ideally the patient has some sort of self-knowledge and autonomy, but he usually does not. I think everyone recognizes that this one-to-one relationship is not possible in modern society if we are to care for the kinds of problems we are now faced with. The new units to be cared for are probably the family, the neighborhood, the community, and perhaps even the city, or the whole country. This will require different frames of reference, different attitudes. It will require, in a sense, that each of the helping professionals become in his own way a kind of a social scientist.

A third way, I believe, in which attitude changes are necessary and forthcoming is the way in which the contact is made between the helping person and unit, such as the family, that is helped. Traditionally, the nineteenth century model, whether it's in medicine or law, requires that the doctor and the lawyer not solicit business. The lawyer does not stir up litigation; the doctor does not go out to find patients. To continue this is, today, an impossibility. People do not know when they have a legal problem; people do not know very often when they are sick. We have just begun to recognize that it is necessary for professionals to change their way of viewing the caring function — they must go out into the community, to help educate the people to self-recognition of their need for help, and begin to take a more aggressive role in finding the sore spots, so to speak, of individual and social ills.

Now this is going to change the model of the doctor, of the nurse, of every professional that we know. It's already begun to cause serious repercussions, for instance, in the law. In poverty areas there are serious needs for legal help. Indeed, the lack of this help is often a contributing factor in the exploration and abuse of the poor. I must say in the law we are probably waiting for a Flexner report, we are waiting for a clinical program which, in medicine, was instituted fifty years ago. We will have to face the professional problem of legal ethics in a new context. Soliciting business can no longer be thought of as "ambulance chasing"; it must be viewed as part of the social mission of the profession. In short, we must go out and find people with legal problems and try to help them. Otherwise, there will be no solution to the kind of alienation and hostility that is felt by the people in poverty toward the power structure, or toward those representatives of the power structure that they need help from, who are usually the professionals. Indeed, why should the profession be thought to represent the power structure — since much of the help needed is against the abuses of power? Like Caesar's wife, the professions should be, in this, above suspicion.

Now this will, I think, necessarily be accompanied by changing attitudes to the profession of the people and community being helped. The distrust in poverty areas to professionals is very common. This distrust is often self-destructive. People don't come back to out-patient clinics. They are sometimes too far away; they feel they're coldly treated; they don't speak the same language; they feel that they are being condescended to; they have no feeling of participation in their own lives. In the case of law, they conceive of the lawyer as the representative of a repressive force associated with the police, even though legal-aid clinics and public defenders are very assiduous in trying to defend people. I do not think that the small portion of our resources that we give to this kind of effort is sufficient to change the attitudes of the poor. Larger efforts, greater resources and a pervasive new attitude by all professionals with whom the poor come in contact may bring about this larger change in how the helping professions are seen from the "underview".

Now a fifth consideration in this attitudinal change is that I believe that society generally, and especially the helping professions and most especially the health professions within the helping professions, must face up to certain ethical problems that we have not faced up to. We must face up to ethical problems which thirty or forty years ago might have been answered with the Hippocratic Oath, but cannot be answered so today. Some of these problems are problems of whether to keep people alive or not, or who is to pay for the care of what people. They can't be approached by lectures that are given in continuing education courses after certain sets and biases are established in the basic education of the professional. They are problems that anyone in the hospital has got to face quite often. I won't say every day, but often enough to be aware that we are avoiding the problem. The problem, often an economic one, always resolves around an ethical consideration about the nature of human life and the values that we are concerned about. I do not think that the old resolution of it in the Hippocratic Oath answers many of these problems.

Another question which comes about, in terms of the ethical considerations, is the following: If we are to respond and build new professions, what are we going to do about the people whom we are in a sense redeeming? In many community comprehensive care centers, we find that from out of the community we are getting and training new kinds of technicians. They may be the old breed of medical aids or the newer breed of community liaison officers or health inspectors. We know that in a number of psychiatric clinics, ex-patients become very good psychiatric aides. We also know that former alcoholics become very helpful in dealing with alcohol problems, and that former narcotic addicts very often become very adept in dealing with the problems of narcotic addiction. We also know that if we are to go into communities and try to redeem people in terms of education for these vocations which they are well suited for and have impulses towards, we have to face the problem: are we going to keep them out because they have a criminal record? Are we going to formalize moralistic notions, which are basically a middle-class attitude toward a sub-culture, and so prevent the cure and acceptance of large bodies of former victims of social malaise?

Now, I've been talking about an underview. It's been observed quite a bit that if we continue the type of medical attention that is given the poor, we will have a bifurcation of medical care facilities in which the very rich and the very poor get the best medical attention. But, just as the civil rights movement has made us aware in many ways of rights which all of us possess, and are dear to all of us, similarly I think that the experience we have in certain kinds of community activity in poverty areas will establish for us new challenges and new responses to different kinds of social problems, such as the care of middle-class families in the middle-class communities. Of course, we have to be aware that there will be different principles which apply to different social milieu when we deal with helping people, or helping communities; but, in any event, it should be remembered that the changes we are going through and I'm speaking of will affect everyone, at all levels of society.

Throughout this underview I've been taking, I think there has been a bias on my part, a basic value subsumed within many of my remarks, and I may as well get it out in the open and say what it is. The ideal and the value which I aspire to, and I would hope that all the helping professions would aspire to, is a degree of self-knowledge on the part of the unit or person helped, and a degree of self-regulation, so that, in a sense, our job would be to put ourselves out of business! Ideally, if preventive medicine were as successful as we would hope it to be, the need for medical attention could be minimized considerably. So, in a certain ideal sense, what we are talking about is making society healthy so that instances of "pathology" are minimized. This we must do by a development of self-awareness and self-regulation — a problem which is very acute in the areas of poverty. The fact is that the poor are very often unaware that they must be suffering from some crisis which might be called a disease, or even a legal problem. They have very little self-knowledge; and, if they do have self-knowledge, they don't know where to go; and, if they do know where to go, they probably don't trust the place they can go to; and even if they go to the place and trust it enough, they very rarely have the resources internally, or financially, to continue and pursue the self-help that they are pursuing to a conclusion.

This raises the last point which I think is a most significant one. It has to be asked and it is probably constantly avoided, and that is of politics, which deals with the highest values that are at stake in any particular community. Simply put, the question is: How do you allocate the resources of a community? Do you build a hospital or do you put the resources into preventive programs? Do you build prisons or do you put your resources into preventing crimes in certain ways? Do you build a road which will help some people travel faster to certain places, or do you build a public transit system which helps other people and has a different impact on the community? In other words, the decisions on allocating resources are the basic ones.

Now in the area of the helping professions, we are now suffering from serious dislocations in the allocation of resources that were originally projected about six or seven years ago and started to become realized in the poverty program. Because of the war in Vietnam they have been seriously cut back. This is a political decision and we all must recognize that what we're doing in one area will be a sacrifice in another area. This has been recognized in terms of research, that when we decide to go to the moon, we sacrifice certain kinds of allocations and resources for medical research. In other words, we cannot do all things and when we decide one possible bridge among many, we make basic political decisions which have ramifications for the kinds of things which have to be done in the helping professions. Even when we do have the resources, there are other decisions to be made. For instance in the NIMH program, or in the NIH program, basic decisions have to be made as to whether to put your resources into basic research, or applied research, or manpower training. It may be that basic research will, in a forty-year period, give us better results than if we put our resources into manpower training. It may be that applied areas will give us better results. Certain decisions have got to be made and they will very often be at the sacrifice of one value or another. For instance, if we were to decide to put almost all of our money into basic research for mental health and sacrifice the training of mental health personnel, think of what we would be doing: We would be neglecting one generation in favor of a later generation. That might be a proper decision; but, it's a very difficult one to make, and we should be aware of what we are doing. As I understand it, the NIMH now makes the allocation of about one-third for manpower training, one-third for applied research, one-third for basic research. This seems to be a rule of thumb for the three competing areas. But rules of thumb have ways of deciding large issues and they are issues which the education for the helping professions must take into consideration. They are the issues that grow out of the social contexts in which we live and work, and so long as we are isolated from these social contexts, I think we will be less helpful people.

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Community Colleges: A New Resource In Meeting Health Manpower Needs

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My sincerest and deepest congratulations from all of the community colleges and agricultural and technical colleges in New York State to the new School of Health Related Professions of State University of New York at Buffalo. We share the enthusiasm and look forward with high expectations to the continued cooperation of the two-year colleges and the School of Health Related

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Introduced by: Mr. John Evanko, Director, Division of Vocational Rehabilitation, Buffalo

Professions. My congratulations and best wishes are founded on two bases: first—recognition of the many social needs that will be met and satisfied by the programs and services of the new School (as members of that society we should all be grateful for the action taken to establish the new School) and, second—awareness of the availability now of a long-needed partner in a State University of New York center to work with community colleges in program development and professional staff development.

My role at this conference, as I understand it is twofold: First, I am expected to provide you some information about the burgeoning community college development in New York State and in the Nation and, second, I am to report on and describe the part these colleges play in the partnership of institutions within the program of the State University of New York in meeting the society's rapidly growing demands for trained personnel in the health fields.

The twofold role assigned to me today is a familiar one to me. It seems to be a standing requirement that preliminary to a substantive discussion of any one aspect or part of the community college program, there must be some attention given to these colleges in the general sense — this despite the fact that community colleges have been operating in the country for over sixty years and in New York State for almost twenty years. Maybe the constant need for interpretation and re-interpretation of the form and functions of community colleges results from their relative newness. They are the most recent of the higher educational institutions. Maybe it stems from the variety of names they go by. (In some States they are called "junior colleges"; in the literature they have been termed "people's colleges"; and in New Jersey they are called "county colleges".) Perhaps the generally amorphic view of community colleges in the minds of many people is caused by the variety of functions these institutions seek to perform, for they combine in one institution the purposes of the technical institute, the lower-division — freshman and sophomore — years of the four-year college or university, a center for adult and continuing education, a community cultural facility, and a center for testing, guidance, and counseling.

The role of the community colleges in New York State is best described in two official documents published by the two State agencies with highest responsibility for education in the State. In a special policy brochure, entitled the *Comprehensive Community*

College, published in 1964, the Board of Regents described the community colleges in these terms:

> "I—Comprehensive community colleges should be recognized and supported as the basic institutional approach to providing a broader public educational opportunity above the high school level in New York State.
>
> "II—These institutions should be open to all high school graduates or persons with equivalent educational background, operated at low cost to the students, and located within reasonable daily commuting distance of the students' places of residence."

The State University of New York Board of Trustees described its views of the community colleges in our State in these terms which are set forth in the 1964 Revision of State University's *Master Plan*:

> "*The Two-Year Colleges* . . . The two-year colleges are the very foundation of the University. More and more, it is they who are opening the door to higher education, revealing to the youth of the State the scope of the total University and the educational opportunities it offers them.
>
> "In many respects the demands upon the two-year colleges are far more complex than those faced by other units. These colleges must respond to the widest range of talent and offer a broad spectrum of programs, including the liberal arts and technical and vocational subjects.
>
> "To achieve their objectives, the two-year colleges require an expert counseling service, a wide range of curricular offerings, a detailed knowledge of the needs of the economy, and the finest instruction."

That these broad purposes for the community colleges are, in fact, being implemented is seen in their growth in numbers and in enrollment.

Currently, there are 34 public two-year colleges in the State, 28 locally sponsored community colleges operating within State University's over-all, statewide program and six agricultural and technical colleges that are integral units of the State University. They are located so that currently 85-90 per cent of the people of the State are within reasonable daily commuting distance of a public two-year college. Altogether these colleges enroll over 55,000 full-time students, nearly half of all full-time students reached by

State University's program and about one-quarter of all reached by any kind of higher education in the State.

There are seven more community colleges in progress of organization, two to start this coming year, and three to start in the fall of 1968. Others are on the planning board. By 1974, over 95 per cent of the State's population will be within reasonable daily commuting distance of a public two-year college. And by 1970, over 90,000 full-time students will be enrolled (if our predictions are valid and implemented). At that time, 75 per cent of the full-time students in State University supervised programs will be attending public community and technical colleges.

What does all this mean for health manpower and the specific interests of people at this conference? I believe it means a great deal! The largest implication of the community college development in New York State and the nation is that it is helping to meet the first main challenge presented in Dr. Rosinski's speech this morning — the need in our society for a larger general pool of educated manpower. When a community college is established, research on the subject indicates that the percentage of high school graduates who go on to further education increases strikingly, sometimes as much as 50 or even 100 per cent.

It means a lot, moreover, because the two-year community and technical colleges are strongly committed to providing the necessary training for technicians and semi-professional personnel in all fields of employment. Last year over 60 per cent of the total enrollment in these institutions was of students enrolled in programs designed and offered by the college to prepare and lead the student to direct employment. The record of placement and the success of our graduates in the occupational technology programs is excellent — I believe it is the best in the nation. Employers from far and wide, as well as those locally, literally snatch up the electronics, mechanical, data processing, and other engineering technicians as soon as they graduate. The same is true of those who finish the semi-professional programs in business, commercial, and agricultural fields.

In health related technologies and other related fields the same is true. The array of specialized fields for which the two-year community and technical colleges are providing trained workers is already impressive and is growing rapidly. In doing this, the community colleges are helping to meet another of the challenges suggested this morning in the speeches by Miss Switzer and Dr.

Rosinski — the need for more upward and lateral mobility in the health related professions. Recognition of the very significant part that the community colleges are playing is clearly evident also in the fact that the *Allied Health Professions Act* passed last year by the Federal Congress authorizes participation by the two-year as well as the four-year colleges and universities.

Let me give you first just a quick picture of the present service in this area. In the fall of 1965 (the latest year for which we have figures), a total of nearly 4,700 students were enrolled full-time in our two-year colleges in health related occupational curriculums. This represents about one-tenth of all full-time enrollment in career programs in community colleges and technical colleges — a very important fact in view of the recency of development of many of these programs. There were over a thousand in fields related to medicine (medical laboratory technology, and medical office assisting), another thousand in fields related to dentistry (dental hygiene, dental assisting, and the like), more than 2,000 were in nursing, and some 300-400 more in other fields (such as inhalation therapy, ophthalmic dispensing, radiological health, and x-ray technology).

All through this conference you are hearing the call for a team approach to meeting the health manpower needs of our society. You can see that the two-year community and technical colleges already are a strong and contributing member of the team. We intend, in every way we can, to help them carry on and expand their role.

In this connection, I want to talk with you about the "Community College Health Careers Project" and the way the two-year colleges, State University of New York at Buffalo, and City University of New York are cooperating in the project.

The "Community College Health Careers Project" was initiated about two years ago by the State Education Department with the cooperation of the State University of New York. It was in answer to the question that is raised constantly (and has been raised again at this conference): What are the new fields of a subprofessional or technician level that are emerging in the human health field? To this basic question, the planners thought of the project as seeking objective information and insight into two related questions: (1) What sort of curriculum — learning experiences and subject matter content, clinical practice, etc. — might a two-year college provide to train the needed technicians in the fields? and (2) Where are the instructors for these programs coming from and how can they best be trained? Some money to get the project started was obtained from the U. S. Office of Education — Vocational Education — Act of 1963 program, and the Kellogg Foundation.

You will be interested in the ten fields that were identified as viable training areas for the health manpower needs of the State and within the scope of education and training properly conceived to be a two-year college program. Pilot programs in each of these is now being developed at a cooperating two-year college with the help of a statewide advisory committee. The programs and the cooperating community colleges are:

(1) Environmental Health Technology —
Broome Technical Community College
(2) X-ray Technology — New York City Community College
(3) Inhalation Therapy Technology —
Nassau Community College
(4) Medical Emergency Technology —
Manhattan Community College
(5) Bio-Medical Engineering Technology —
Monroe Community College
(6) Medical Library Records Technology —
Alfred Agricultural & Technical College
(7) Occupational Therapy Assistant —
Erie County Technical Institute
(8) Dental Assisting — Erie Tech. — SUNY Urban Center
(9) Surgery Technology — Nassau Community College
(10) Ophthalmic Dispensing Technology —
New York Community College

A key and major part of the entire project centered on the question of instructor recruitment and training. Obviously there just are no well organized and developed training centers committed to train instructors for these fields as there are for training community college faculty in the liberal arts and sciences. We know where to go to get qualified faculty to teach mathematics or history or biology or even nursing. But where do you go to get a good faculty member in x-ray technology or inhalation therapy or medical emergency technology? Even more basic a question — how do you train such an instructor?

We were fortunate to get a positive response from both State University at Buffalo and City University of New York to assist in the search for an answer to this question. Again with the help of the advisory committee in each area, each University and a group of the cooperating community colleges are moving forward in formulating an instructor-training program. At State University at Buffalo, School of Health Related Professions, attention is concentrating on five fields: environmental health, bio-medical engineering, medical records library, dental assisting, and occupational therapy assisting. At City University of New York attention is on the other five fields: x-ray technology, inhalation technology, medical emergency technology, ophthalmic dispensing, and surgery technology.

All of us in the two-year colleges all over the State (and indeed over the nation) feel that we have a great stake in this work. We want to do all we can to make it work for several reasons: (1) the faculty are needed *now*; (2) the techniques and institutional relationships that are being developed, we hope, will be extended to other *new* occupational instructional fields in the two-year community and technical colleges; and (3) we feel this is the *best* way to develop *both* high quality curriculums and to train high quality instructors.

The alternative we can try (if this pilot program does not eventuate successfully) is to train faculty ourselves in the community colleges — a kind of "do-it-yourself program." Indeed, this is happening in some fields now. To illustrate, I shall quote a public news release dated January 12, 1967 from Mohawk Valley Community College.

> "A unique project to develop a new category of nursing educators for the associate degree nursing programs will be undertaken by Mohawk Valley Community College.
>
> "The MVCC Project is designed to alleviate the shortage of qualified faculty by developing a new professional level, the assistant instructor. Through the use of a special training program, the college will engage the services of nurses holding the bachelor's degree to be assistant instructors in a clinical situation when they are under the supervision of regular faculty members.
>
> "Pres. Payne said, 'the role of the assistant instructor will partially free the regular faculty for more creative duties.
>
> " 'It is further hoped,' he continued, 'that this opportunity will encourage the assistant instructors to continue their education and become regular faculty members.' "

This is an interesting project that is being tried at Mohawk Valley. We are watching it closely. But speaking at least as one responsible worker in the community college field, I wish to say that such "do-it-yourself" efforts, without the cooperative support and involvement of a university center or four-year college with the special capabilities of its faculty and advanced know-how in the professions to assist them, are only a second-best approach.

We in the two-year colleges need the best instructors we can get. We feel that primary responsibility to train such faculty personnel to meet our needs is the responsibility of the University Centers, especially, and the four-year colleges, to some degree. If forced to do it ourselves, we will, of course, do so and produce the best faculty we know how to train. This, however, would be a diversion of energy from our main responsibility. I would rather team up in this effort, however, as we have with you at State University at Buffalo and City University of New York (and other such centers) in the "Community College Health Careers Project." How you answer that challenge will determine, I believe, in more ways than we now realize the long-range future of community college and, indeed, all higher education in New York State.

Our office in Central Administration of State University of New York has only one large goal — to develop the most pervasive and highest quality two-year community and technical college programs in the nation. We dearly appreciate the help we have already been given to move forward to this goal in the health careers by the Community College Teacher Preparation Center of the School of Health Related Professions at State University at Buffalo. We look forward to further extended and augmented cooperation of this type with State University at Buffalo, not only in this occupational field, but all of the others as well.

So, as the State University of New York looks at the community and technical colleges as "the very foundation" of the University, there is good reason to view the relevant programs in these colleges as "the very foundation" of the health related professions and of over-all efforts to meet society's demand for trained, competent, and complete health care. We in the community and technical colleges stand ready to continue to cooperate with you, Dean Perry, and with your colleagues in the State University at Buffalo's School of Health Related Professions to make this foundation a firm one, a reliable one, and one that will last a long time.

PROGRAM

DEPARTMENT OF MEDICAL TECHNOLOGY

Tuesday, May 2, 1967, 9:00 a.m. - 5:00 p.m.

At E. J. Meyer Memorial Hospital and Buffalo General Hospital. (Individualized Program to be arranged for each participant.)

Nellie May Bering, B.S., M.T. (ASCP); *Radioisotope Laboratory,* Teaching Supervisor, Oscar B. Hunter Memorial Laboratories, Washington, D. C.

Richard Camfield, B.S., M.T. (ASCP), *Instrumentation Laboratory,* Instrumentation Instructor, (Research and Development Central Laboratory) University of Colorado Medical Center, Denver, Colorado.

Esther F. Freier, M.S., M.T. (ASCP); *Clinical Biochemistry,* Associate Professor, Department of Laboratory Medicine, University of Minnesota, Minneapolis.

Eleanor G. Morrison, A.B., M.T. (ASCP); *Blood Banking,* Division of Biologics Standards, Public Health Service, Department of Health, Education and Welfare, Washington, D. C.

Nancy Neale, M.S., M.T. (ASCP); *Microbiology,* Temple University, Philadelphia.

Verna Rausch, M.S., M.T. (ASCP); *Electron Microscopy,* Associate Professor and Associate Director, Division of Medical Technology, Department of Laboratory Medicine, University of Minnesota; President, American Society of Medical Technologists, Minneapolis.

Marjorie Robbins, M.S., M.T. (ASCP); *Hematology Laboratory,* Associate Professor; Chairman, Department of Medical Technology, College of Allied Health Professions, Temple University, Philadelphia.

Ina Lea Roe, M.S., M.T. (ASCP); *Audio-Visual Techniques,* Assistant Professor, Department of Medical Technology, College of Allied Health Professions, Temple University, Philadelphia.

Mary Nell Spraberry, B.S., M.T. (ASCP); *Data Processing,* Assistant Chief Technologist, University of Alabama Hospitals and Clinics, Birmingham, Alabama.

Wednesday, May 3, 1967—Norton Union, Room 232

9:00- 9:15 J. Warren Perry, Ph.D., Dean, School of Health Related Professions, SUNY/B

9:15- 9:30 John V. Fopeano, Jr., Ph.D., Associate Professor, Chairman, Department of Medical Technology, SUNY/B

9:30-12:30 Ten Minute Presentations by Clinical Consultants

10:00-10:30 Coffee Break

12:30- 1:30 Lunch—Norton Union, Room 234

Norton Union, Room 231

1:30- 2:00 Nellie May Bering, B.S., M.T. (ASCP); Teaching Supervisor, Oscar B. Hunter Memorial Laboratories, Washington, D. C.
Programs in Junior Colleges

2:00- 2:30 Verna Rausch, M.S., M.T. (ASCP); Associate Professor and Associate Director, Division of Medical Technology, Department of Laboratory Medicine, University of Minnesota, Minneapolis.
Baccalaureate Degree Programs

2:30- 3:00 Ruth F. Hovde, M.S., M.T. (ASCP); Professor and Chairman, Division of Medical Technology, Department of Laboratory Medicine, University of Minnesota, Minneapolis.
Graduate School Programs in Medical Technology

3:00- 3:30 Coffee Break

3:30- 4:00 Patricia A. Amos, M.S., M.T. (ASCP); Educational Director, Clinical Laboratory Sciences, University of Alabama Medical Center, Birmingham, Alabama.
Continuing Education.

4:00- 4:30 Stephen B. Friedheim, B.A., Executive Director, American Society of Medical Technologists, Houston, Texas.
Professional Organizations and Professionalism.

Back Row: (left to right) Esther F. Freier, Ruth F. Hovde, Eleanor G. Morrison, Patricia A. Amos, Nellie May Bering, Richard Camfield; Front Row: (left to right) Ina Lea Roe, Mary Nell Spraberry, Marjorie Robbins, Verna Rausch.

Programs In Junior Colleges

NELLIE MAY BERING, B.S., M.T. (ASCP)
Teaching Supervisor
Oscar B. Hunter Memorial Laboratories
Washington, D. C.

"The American Association of Junior Colleges in the past year has stepped up its efforts to provide national direction and assistance in the planning of semi-professional and technical education programs in two-year colleges. These efforts have been in the growing recognition of the fact that education beyond the high school is required to prepare men and women for occupations in today's technological society and the junior colleges are ideally suited to this task, because of their flexible admission policies, orientation to community occupational needs, emphasis on guidance and counseling that will help students to make appropriate career choices, low cost and the proximity of these institutions to the students to be served."

This is a quotation from Dr. Robert Kinsinger's Monograph on Health Technicians and Overview. The committee that I'm serving on, The American Association of Junior Colleges-National Health Council Committee on Health Technology Education, held its first meeting in late 1965. In 1965 and 1966, the A.A.J.C. was involved in trying to set up guidelines, seeking assistance and searching for assistance in the health technology fields. In 1966, they held a regional conference in which they discussed problematical and health related programs. They have since published a Monograph containing questions and answers which were raised at that conference. They have convened similar health conferences in St. Louis and in Chicago. The A.A.J.C. held an Arlie House Meeting in which they invited junior college counselors and science people to discuss counseling people in the health fields and the kinds of consultants necessary for developing health technology programs.

This information serves as background for what I'm going to be saying. The A.A.J.C.-N.H.C. Committee started its first meetings in January of 1966, subsequently the committee was funded by a grant from the U. S. Department of HEW, Office of Education, Bureau of Research, Division of Adult and Vocational Research. The purpose of this committee is to develop the guide for program planning in the health technology fields. The committee composed of ten members—five from the junior colleges and five from the health fields. The five from the health fields represent the National Health Council. There is one member from the Chicago Health Council, one member from the New York Health Council, I'm from the D. C. Health Council, one member from the N.H.C. Board of Directors and a hospital administrator. When the committee was appointed they were not trying to choose individuals from the professions, they were trying to bring in interested areas in the health council set-up.

The committee has been meeting every other month since January, 1966 and we have a project director who has been writing the guidelines. I would like to go over some of the points in the guide and tell you what they are about. We hope the guides will be published in September and distributed to all junior colleges, and sent to all the members of the National Health Council.

The National Health Council is an organization of health practitioner organizations, voluntary and service agencies and some federal agencies. There are over 70 members to the National Health Council. These guides will be sent out on broad mailing and many of you will be hearing about them. The purpose of the guides is to help health care facility administrators, the health practitioner associations and the community colleges in developing programs in the health technology areas. The guide is a process —it is *not* a specific curriculum for any one particular program. If you go in there looking for how someone is going to set up an inhalation therapists program, you won't find it. It's strictly a process.

We have divided the guide into three parts — Part I is: "The College Administration," Part II, "The Health Practitioner Association" and Part III, "The Health Care Facility." For The College Administration we have set up eight steps in the process that we would ask them to follow in setting up their programs. I'd like to go over just the steps with you. Step I — The College Administration is to define the scope of health technology programs. This is a preliminary step to cooperative planning. It is a time of orientation in which the college becomes knowledgeable about the occupational field the college hopes to serve. It is during this time that the college will investigate the health resources of the community. Step II — The college should become generally aware of the operative systems of standards in the health field. These are the legal standards, whether there is voluntary certification, whether there is registration, whether there is national mandatory registration or State statutes and so on. They should become aware of the standards in the field. Also, this goes along with the National Commission on Accrediting and regional accrediting agencies in the field. I'd like to read to you some of the recent actions of the National Commission on Accrediting with regard to the junior colleges.

The National Commission on Accrediting held a meeting in Chicago in the first part of April. They considered two resolutions regarding the junior colleges. I'm reading this from the *Chronicle on Higher Education.* "The National Commission on Accrediting has endorsed regional accreditation as a most desirable basis for deciding which colleges are eligible for federal funds for associate degree programs. The procedure would apply to all institutions offering a two-year degree in fields supported by government appropriation, but its primary effect would be felt in junior colleges where there has been strong institutional support for such an arrangement. The Commission's action is aimed at preventing specialized accreditation. The approval of individual programs by accrediting organizations in various fields from being used by the U. S. Office of Education as a major criterion in the distribution of federal funds to the institutions." The junior colleges have been most concerned that they may end up with half a dozen groups coming in to accredit their programs. They would rather deal with one accrediting agency. The resolution reads that "the most desirable means for insuring quality education at the junior college level for the purpose of securing federal aid would be a list by the National Commission on Accrediting." According to the resolution, the accrediting would be performed by the regional commission with the specialized associations providing guidelines in assessment of the associate degree programs. The associations, i.e., the health practitioner associations, would provide a list of qualified specialists in the profession to serve as regional accrediting teams in the junior colleges. The second resolution that was adopted called for the development of recognized consulting associations to work with college administrators and faculty members on problems relative to specialized education. This list will be prepared by the Nationl Commission on Accrediting and the American Association of Junior Colleges.

Step III — After the junior college administrator has decided that he now knows that standards are necessary for guiding routes, the next step for the administration is to review the goals of the college and the impact to adding health technology programs. This time they are taking into account how one of the new programs can be built upon the existing strength of the college and on the existing strength in the science fields. In other words, they should not start a new science technology program if they have a weak basic science department. They need to be sure of this before they go on to a new health technology field. At this point in the guideline, we come to what we call a decision point. A decision has to be made by the junior college as to whether they are interested or not in developing a health technology program. If he, the administrator, decides to develop a health technology program, Step IV is to decide in which health technology field programs are most needed by the community. At this point, the college administrator sets up an Advisory Committee. He brings in an Advisory Committee — it may be his own faculty people or it may be some health coordinator in the community, but in any event, we recommend that at this stage he set up an Advisory Committee and that should include representatives of the health professions he wishes to survey. He should consider the national manpower needs as well as the community needs. He should also consider what other health programs have been established in the community. This is in his survey—surveying existing activities.

Step V — To evaluate the feasibility of the college developing specific programs. The college administration and the advisory committee should examine the feasibility of the college developing specific programs. The need for the program has been established through the survey. In deciding which program is going to be developed, or multiple programs, there are several criteria listed. They are:—adequate clinical facilities available in the area — is there a good probability that quality criteria within the high priority health specialties can be met? This brings in licensing and accrediting. Can qualified teaching staff and director be obtained for the programs under consideration? Will students be attracted to the program? Will they be available? If they are available and graduate, will the salaries be attractive to these students? Is the general cost of the program consonant with other college financial resources? Can the college meet the demands which the students will place on its existing physical facilities, that is, the libraries, etc? Would the investment in the health technology programs be more feasible if the college sponsored several programs in related areas rather than a single program? All of these questions must be taken into consideration at this point.

The administrator and advisory committee have to make another decision at this stage — it's a second decision point. This is the selection of the health career program that they are going to develop. Once they narrow it down to the programs they are going to start we have Step VI — securing program resources. The committee came out strongly for the appointment of a director of a program anywhere from a year to six months before the program is to start. In our discussions, this was unanimous. The statement was made that you need to appoint a director or secure the director of the program at least a year before the program starts. Also, the junior college representatives on this committee felt quite strongly that a formal contract be entered into for the use of clinical facilities. There is a sample contract for this in the guide. Also, at this step, program resources, it is necessary to develop the curriculum and objectives of the program. Contacts are made with the high school counselors, since recruitment potential is a part of program resources. Step VII — Curriculum development automatically follows — there is a lengthy discussion in the guide regarding curriculum development and for the program that is to be initiated. Once a program is in operation, the faculty of the junior college and in the clinical facilities need to know different things which are listed in the guide. Step VIII — There is a program evaluation and there are several pages on suggestions for evaluation for both the college administration and the facilities.

This completes the first section of the guide and this is the largest section. In developing these eight steps we used many approaches, among them being the kind of questions the A.A.J.C. has been receiving from junior colleges who are setting up programs. The health professionals have been suggesting some of the steps given here, particularly in regard to bringing in Advisory Committees. I think we would have liked to bring in advisory people even earlier than was decided upon for the guide, but as soon as the needs are determined consultants and representatives are brought in to help. In the section on health practitioner associations, we are discussing what they should be doing in helping the faculty in their resources and what they should be doing in the community and, of course, the health care facility administrators and what their role is. Time doesn't allow me to go into much more than that.

We plan to introduce the guide at a regional conference in July. Approximately 50 people will be invited to a two-day regional conference. These guides will be used to determine how they will be accepted; how they can be implemented; distribution, etc. We originally planned to have six regional meetings but the grant reduced this request to one meeting. After the regional meeting the guides will go to press and they should be available in September unless the regional meeting turns them down. We have worked and re-worked with professional writers -- the staff is competent and we had professional know-how, so this is not an amateurish work by any means.

We devoted considerable time to discussion on how you would set up lists of States who would have licensure for the various health fields. If you think of all the health technology fields where this is possible, the list would be very long and soon outdated. We had to give a list where you would find information; a lot of this is in the appendix. This is to be a working guide, yet one that is not to be used as the last word in setting up health technology programs. It is a flexible guide and it does not state at any stage of the game — this is the way to do it. It tries to direct the process.

There is another committee that is working in the junior college area and this is the A.A.J.C. National Council on Medical Technology Education. The same five junior college representatives who are on the committee I'm on, that is, working on the guides, are also on this other committee. The AAJC-NCMTE Committee is devoting its time to discussing programs and recommendations in the medical laboratory field. That committee has focused in on one particular medical laboratory program. The guide committee has been talking about all health programs along the line. At one point in our deliberations we considered taking one curriculum and going through it and setting it up according to the process outlined in the guide. We thought if we took any one curriculum we would be in hot water. Somebody said, why don't you think up a curriculum which doesn't exist now? We decided if we did that it would soon exist, so we stayed away from that.

As for other things which are going on with junior colleges there are new programs that are being organized in other parts of the country in which the clinical laboratory technician program is part of the second year and is spent in the clinical laboratory or where there is a working agreement with the clinical laboratory whereby students go to the laboratory for approximately five months of the second year. These five months are not consecutive — they are mixed with courses in the junior college — students may spend the morning in the facility and the afternoon in the junior college.

Last July the American Council of Education sent a questionnaire to all junior colleges requesting copies of their curricula. This questionnaire was prior to the publication of the book — *American Junior Colleges* and from that questionnaire there were 57 junior colleges listed in Medical Technology Programs. Of these 57, 21 were transfer programs according to the questionnaire — among the other programs were those which ended in an AA degree and probably not transfer. We had a look at these catalogs and are able to say that 31 were, what junior colleges don't like to use the term, "terminal" — we really can't say those colleges were terminal, but the colleges themselves would not list them a "transfer." There are laboratory personnel curriculum programs in junior colleges and from what we understand, there will be more. The main pressure right now in the medical technology area is to give some guides to the junior colleges so that they can follow them in trying to meet the crisis of the shortage of health manpower.

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Graduate School Programs In Medical Technology

RUTH F. HOVDE, M.S., M.T. (ASCP)
Professor and Chairman
Division of Medical Technology
Department of Laboratory Medicine
University of Minnesota
Minneapolis, Minnesota

Today I have been asked to talk about Graduate School Programs in Medical Technology. I am very pleased to talk on this subject; this is an extremely important pertinent subject, one which all of us in the academic world, particularly in University settings, are going to have to give much thought to. I will make some general remarks and then try to make some remarks specifically with Medical Technology Graduate Programs in mind.

Right now we have at our School a Master's Program — we do not have a Ph.D. Program — we do not feel that we are ready for this yet, but I am sure the day will come in our profession when there will be Ph.D. Programs offered likewise. There is no reason why not; we have the precedent in medicine. Medicine is actually the combination of skills and theory—exactly what we do, and in engineering, certainly, and in many other fields. So I believe that in the future we will have programs beyond the Master's level.

Again, I want to say that Graduate Programs in Medical Technology should not be thought of as taking the place of the regularly established graduate programs in the basic science areas. There is a need for both types of programs. Certainly, in our concept, in the objectives of our program, we are not in conflict with the graduate programs in other disciplines. I think this is an entirely personal choice of the student as to what avenue he wants his career to take. Graduate programs in the other disciplines — we will get on to this a little bit later — usually are for more research-oriented people, and for a more formal academic teaching type of career.

In our program we hope to interest our graduate students to stay in the field of medical technology and not go into a basic science field. Frankly, we need leaders; we need educators; we need administrators in our field and hopefully, by graduate programs, we can produce some of these people. So I do not see any conflict at all between our graduate program or programs in this field as broad as medical technology and the existing established programs.

I do not think I have to go into any great detail about the needs for a graduate program. Certainly everyone who was here at the meetings on Monday knows that the need for teachers was stressed by every speaker. All of us in hospital schools or in collegiate schools are always faced with the problem of well-prepared, adequate faculty. We need graduate programs for our commitment to our service work in central laboratories. The word specialization came up a little while ago — we certainly need people in the areas of the specialties within medical technology. Our graduate programs should begin to provide some of these. Certainly we need graduate programs in the teaching area within medical technology. The time is past when we can wait for people to develop within their jobs as many of us did over the years and to grow up with experience in teaching areas. With the increasing number of collegiate programs at the two-year level, at the four-year level and at the graduate level, certainly the need for teachers is growing and expanding much faster than we can even meet the need.

Another great area of need for graduate programs in medical technology is in the area of research. You heard today about many of the things that we do not know about our educational programs —we have done literally nothing about research and education in this field. It is a wide open field, we need some good work in this area. We need some graduate programs for our technologists in the specialties to be able, as scientists, to take our place in our profession with the know-how of research. After all, we are supposedly first and foremost scientists; we must provide some way of using our talented people in this line. There is very little done to encourage medical technologists in the day-to-day work to do any type of research. There is a great need for it, particularly as you all know, in the applied methodology.

Another great area of need, and why we must develop some graduate programs, is the fact that we must keep our potential leaders in this field. In the past we have lost all too many of our bright young people with real ability to other fields, simply because there is no opportunity within our own field, either for education beyond the baccalaureate level or for job opportunities that would fill this creative need in a person. We have to stop the drain, the terrible drain, of our leaders into other fields simply because there is not a place for them in our own profession.

One of the hallmarks of a profession is that as a professional organization group of people, we are the possessors and custodians of a special kind of knowledge for which we have special talents. This knowledge is acquired by long and arduous studies. One of the responsibilities of a profession is to enhance and extend the knowledge and understanding of which our professional commitments are made. I think all too often we forget about some of the responsibilities that we have as a profession, because we are so busy trying to say that we are a profession. We are living in a very sophisticated society — there is much sophistication coming in elementary education, secondary education and students are pressing the colleges and graduate education to meet some of the innovations that are occuring in our high school programs. This again puts a burden on our educators in our particular field to keep up with the increasing sophistication.

As Murton said in his article on professional status that all professions have been granted autonomy by the public because of the expertness of the service they render. Then he goes on to say that ultimately, this expertness comes only from research, from education and discipline of experience. This is why professions attach much importance to research and education. This is again why we have to keep constantly working toward providing those mechanisms whereby our people can find satisfaction in this profession. BUT! A word of caution here — just because there is a need for graduate programs I would certainly caution against jumping into a graduate program. Graduate programs are difficult from the standpoint that you have to require a certain competency of your faculty over and beyond other competencies. You have to have facilities. Graduate education is a very expensive type of education because it is a "one to one" type of education. You have to have faculties that have the ability, the time, the know-how, to work with graduate students and to help them, to advise them. I would caution any school against opening a graduate program simply because there is such a pressing need for it, before you are ready for it.

I have tried to list for you now the objectives and goals that I believe graduate programs in medical technology should include. I am sure there are many more than I have listed here, but I wanted to give you some idea and, hopefully, some inspiration for some of the people in this room, and I am looking to the students to think very seriously of going on with graduate education.

Graduate programs, and here again I will speak about medical technology specifically, should provide study and depth in one of the sub-specialties in medical technology, to allow for a degree of competence, knowledge, understanding and skill beyond the level of the baccalaureate graduate. The program should allow for functional knowledge and beginning competence in teaching and/or administration. I believe that a program should contain as one of the goals that, by experience at a graduate level in critical assessment of situations, the student begins to develop a basis for judgments and decisions.

The program should allow participation, intelligently, in research projects for the student to begin to make discriminating use of research methodology for the appreciation of the role of research, for the recognition of researchable problems, and for the introduction of research methodology. I feel very strongly on this point; this is one of the critical areas within any graduate program.

The program should include the opportunity for development of scientific and professional attitudes toward flexibility and understanding for their continual growth and adaptation as new situations arise. Certainly graduate discipline should allow for the opportunity to foster creativity, independent study and critical thinking. In fact I found a very interesting article about graduate programs in chemistry — this was written by Dr. Koch, head of the department at M.I.T. at that time.

"The primary objectives of a professional graduate program (in chemistry) should be to develop in the student the attitudes and the methods of which procedure that characterizes the independent scholar as opposed to the student." Then he goes on in his article: "Graduate seminars and research seminars may constitute the most important part of the instruction of the student. The primary objective of all of them is to get him to read the journal literature regularly and to think independently."

Now traditionally in this country, graduate programs were based on primarily, as all education in this country, the types of graduate programs which developed in Europe. Years ago, there was only one type of degree at the graduate level — the "academic degree." For many years now there have been many fields that have been offering what is called a "professional degree" at the graduate level. Many people are confused as to what is a professional degree and what is an academic degree. I am talking about degrees beyond the B.S. Many institutions give both types of degree in one area. For instance, in Public Health many Universities offer both the professional and the academic degree. Education has been doing this for years and also engineering has been doing this. Originally the academic degrees were the only type of degree that would be acknowledged at the institutions of higher learning. I guess you would call this a form of intellectual snobbery. But this concept is changing very, very rapidly as the professions have grown. More and more professional degrees are coming into being. Now the basic difference between the two types of degrees, and I am sure many of you know this information but at this risk, I will repeat it. The professional degrees are usually those degrees that are offered by the department itself. The department sets the policies for their graduate programs, determines the curricula and sets the rules and regulations for the eligibility of candidates. These degrees are usually then, Master in Public Health (M.P.H.) or Master in Education (M.Ed.). These degrees are perfectly fine, valid graduate degrees. The difference is that the department which offers this degree has the program within its own department. Ordinarily the professional degree is one which follows a set prescribed curriculum of courses. Usually the professional degree does not require a thesis or independent research of the scope that you ordinarily think of in a graduate degree. There are advantages to professional degrees. The one advantage is that in the requirement of these types of courses, you might have an opportunity for a little wider range of course offerings and usually they are completed in less time than an academic degree. There are many Master's degrees that through the professional degree arrangement can be completed in one year's time. It is because they follow a prescribed area of course requirements. There is absolutely nothing wrong with this type of program if this fulfills the objectives of your particular school for your particular graduate program.

The academic program, on the other hand, is that type of graduate program that is under the auspices of the graduate school within an institution. This program then follows the policies, the rules and regulations, the educational objectives of the graduate school. Now, the graduate school, of course, works with each department in the offering. We have the opportunity to outline our program to say what we expect our students to take, what would be necessary to complete, what requirements we would expect for the awarding of the Master's degree. This all goes then to the Graduate School for approval or disapproval. The degrees that are offered here then become the M.S. degree, the M.A. degree with a major and a minor in a related field. These are essentially the differences between the two programs. Usually the academic degree requires a thesis. However, many schools, and in our own institution, this is the prerogative of the major department, whether or not you want to require a thesis in your degree or not. We do. We require a thesis for our Master's program in medical technology. Most academic programs do. Both degrees can be used in relationship to medical technology. Here again this would completely depend on your institution, your own hopes and aspirations and your own objectives for your course. Academic degrees still are considered probabaly a little more prestigious than other degrees, but I certainly would not worry about this. The professional degrees are coming along very well and many of them are real fine degrees. The academic degree requiring a thesis, I believe, gives a student the tremendous opportunity of some independent thinking and for some critical thinking; this is a little bit difficult. I will get on to this in a minute or two. And it allows for some research methodology. Now I know there is always the old hue and cry about research versus teaching at a University setting. I just want to share with you a few sentences from a speech that was delivered by our president, President Wilson of the University. He was talking about the apparent conflict of research and teaching. This is part of what he said, "We place the emphasis upon the process of discovery and creation rather than upon preservation and retention. Preservation and retention are appropriate ideals for a society that has known a golden age and is satisfied with its own times or is content with the hope of recovering the glories of a departed era. But I doubt that there would be much satisfaction to the present generation of either leaders or students when we underline the role of discovery and creation and can see the teacher as one helping the learner to understand the processes of discovery and creation — the roles of research and teaching take on new relationship and the discordant conflict between the one and the other disappears."

In regard to teaching in medical technology there is, of course, conflict with the idea that if you are going to teach medical technology you ought to go into the School of Education. I do not want to get into this controversy today; it would take us a long time to solve this and I doubt if there is any real solution for this. Again, according to Benton writing on professionism — "But if the professional has a will to teach, he will and can do a better job teaching his field than can a person with one, or in some cases, no course in the subject. The prime pre-requisite for teaching is a great deal more knowledgeable in subject matter than will ever be needed for the one in class. The teaching profession needs more instruction in the subjects to be taught rather than how to teach." I do not think time will allow us to get into this controversy. I am sure you all have your own opinions.

What are some of the problems in our experience? I think you might have some interest in knowing what some of our problems have been with our program. We started our program about eight years ago — we started it on a shoestring and as my colleagues have said and have coined a phrase for us — "our belligerent self-confidence." First, I did not think we would be able to get approval for an academic program in medical technology, which is unfortunately not recognized as an academic discipline by many Universities. But I took our plan to our Medical Graduate Committee, the heads of the various departments; the head of the Department of Physiology, the head of the Department of Pathology. The head of the Department of Anatomy at that time said "Miss Hovde, don't go for this, go for the very best that you can if you are going to set up this new program." So we completely revised our plans and were given approval for an academic degree at a graduate level and I think this marks really in my mind a milestone in that we were accepted as an academic discipline and, for my part, this was a real red letter day.

In our experience of eight years we have had very roughly, and

I did not count them all, about 105 applications, completed graduate school applications, that were sent to us via our Admissions Committee. Of this 105 we accepted 35 students over these years. Of the 35, five have completed their degree, 11 are currently in our Graduate Program at the present time. Seventeen of these 35 of the 105 left primarily because they did not have funds to support them any longer in college. We had no traineeships at this time. A couple of these students left because they could not make it scholastically and a couple changed to other majors. Now, of the 70 of the 105 applications that we did not accept, and these are figures that astound me, about 60% of these or 2/3 were not accepted because of inadequate undergraduate training and background. This is a sad commentary and this was the thing that Miss Rausch was trying to get at; that quality of our undergraduate medical technology programs is appalling. About 40% were adequately prepared, they might have been a little bit borderline on scholarship, but we did not have the space or the advisors to handle them, and we did not have funds for support. But I think these figures really point up some distressing facts. Primarily, the distressing fact of poor undergraduate preparation in collegiate programs in medical technology. It also points up the startling fact of the need for support for traineeships at a graduate level. Until last year we had not one penny for any of our people and this kept good people away from this field. Now we have four traineeships from Cancer Control and hopefully we will get some help from the new Allied Health Science Bill. The fact that we have this many completed applicants points out that there are many people that are very interested in going on into graduate work if the opportunities were made available.

One of our problems is in the proper selection of students. This is one of the hardest jobs I think we have ever had as far as our total program is concerned. I do not know of any one single criterion that you could say would be the very best. However, we have found out in our experience based on these eight years, that someone who does not come to us with a very, very strong scholastic undergraduate record just cannot exist in Graduate School at our institution. We have begun to look more at the overall scholastic record than we did in the beginning and if a student does not come with a very, very promising scholastic record, they just cannot complete our graduate requirements at our institution. Selection is very difficult! It is difficult to get a good candidate, acceptable candidates that are potential leaders, scholars in the baccalaureate programs. I think you people have the responsibility to encourage the good, bright, interested student to go into graduate work, whether it is in this field or whether it is in one of the basic science fields. We believe our Honors Program has been one of the ways we have been able to interest our own students in going on to Graduate School work. Another way certainly is what I hope is right on the horizon for us, some attractive traineeships for graduate students.

The other aspect that I think we have to work on is to be upgrading constantly and making more attractive our jobs within our profession of medical technology in order to hold and attract young people who will want to go on into this field. I am not talking just about attractive salaries, but I am talking about attractive jobs from the standpoint of using the skills and the creativity from graduate work. Why don't students go on into graduate work? There are so many attractive job offers for every student of every approved school. This looks very good to a student who has spent four years in college. Many of them have been on loan programs, many of them are in debt, many of them have worked very hard, struggled very hard to pay the tuition to get them through school. The first thing they think of is to get a good job, get some money, buy a car, and go to Europe. I do not blame them for this. This is why I do say we must work very hard to provide some attractive traineeships for graduate work to hold and attract bright young people. Because once you are employed, it is extremely difficult to make a decision to come back to school - to give up your good job - to give up your eight hour day, to give up the security of knowing what you are going to do everyday, etc. To come into the unknown of the graduate program and to give up what fun in life you have had, so to speak, so it is difficult once you get into the working field to have the motivation, incentive, and opportunity to come back into Graduate School. I am almost convinced that we have to try to interest our graduating seniors to stay on in graduate work. Here again this is difficult, because as you know, by far the majority of our students are women and of course, they like to think just about two years of working and then no more working. So it is hard to sell graduate work and this is why, hopefully, that our profession, as it grows, can attract more men. We frankly need more men in the profession and we need their stability. Actually for the men I would recommend most strongly that they give very serious thought to going on to Graduate School. Actually much more so than some of the women.

Why do students have difficulty in graduate programs? I think basically it is because it is very difficult for the average college graduate to adjust to graduate discipline. They have not learned, and these are very broad statements, how to learn; they have not learned to think and to act independently; they have not learned to think critically; they have not learned to handle problem solving. We missed someplace along the line in these areas in the baccalaureate programs. The average college graduate has been very used to following a set, lovely little pattern of courses. They know that today they are going to do this, tomorrow they are going to do that. It is all mapped out for them. In graduate school they are thrown into a program where *they* are going to determine the objectives and what *they* are going to do - it is not laid out in a nice pattern. This is very difficult for students. I am sympathetic with this, but somehow or other we have got to help the students to get over this. They are very accustomed to a lecture system and then giving back by rote facts and figures. There are very few courses that do good testing by problem solving; we have much to do in our baccalaureate programs. When a student is suddenly confronted with graduate work requirements and some of the requirements of the graduate study, they are just lost. It is not just parroting back facts and figures; the student is going to have to think and to assess and solve problems. This is very difficult for the average student. The average student has not been exposed enough to problem solving situations. He hasn't been exposed, surprisingly enough, and I think this would shock you, to the use of library facilities. Every campus has beautiful libraries, but if you would ask how many times a student uses these facilities, you would be shocked. They have not formed the habit of reading any type of scientific literature. Some of you are trying to foster these skills in your seniors. Students have no concept how one would even write, in the English language, a scientific article or abstract. I am being very cruel, but I think I am being very honest too. We have got to do something in our baccalaureate programs to help these students.

The students find graduate programs difficult because they have been *trained* to do a certain number of manipulations without thinking whatsoever of what they are doing. It is all written down here under directions, so what? I use the word trained and, in training people, we have not been educating enough students in medical technology. Hopefully with some of the new programs evolving there are new exciting trends taking place in curriculum patterns and we in medical technology must become prepared for this. There are more people going in for Master's programs. I think there are many of us who are very dedicated in this field and are trying to experiment and are trying to help our students particularly at the baccalaureate level.

The whole fiield of graduate work in medical technology provides an intensely exciting and interesting area. I certainly feel that we have had a marvelous time in these past eight years and I hope we can continue. We have had a lot of rough spots, we have not produced very many people yet but, hopefully, we will grow with each year. I am very encouraged this year because we have 11 students presently in graduate school in medical technology. Another aspect, I feel, is that our graduate program has been a tremendously stimulating experience for our faculty. We have had complete cooperation and contribution by all of our faculty; they are all interested in these students and the program does lead to an extremely exciting type of teaching.

Program
Department of Occupational Therapy

Tuesday, May 2, 1967—Room 233, Norton Union

Theme: Manpower Training and Utilization in Occupational Therapy

9:00- 9:15 Welcome: J. Warren Perry, Ph.D., Dean, School of Health Related Professions, SUNY/B

9:15-10:00 Keynote Speech: *The Mandate for Occupational Therapy in Today's Society.* Wilma West, OTR, M.A., Consultant in Occupational Therapy, Children's Bureau, Welfare Administration, Department of Health, Education and Welfare, Washington, D. C.

10:00-10:15	Coffee Break
10:15-12:00	Educational Panel 1. *Academic Education of the Registered Occupational Therapist.* Nancie B. Greenman, OTR, Ed.M., Associate Professor and Chairman, Department of Occupational Therapy, SUNY/B. 2. *Education of the Certified Occupational Therapy Assistant.* Ruth A. Robinson, OTR, Colonel, U. S. Army (Ret.) 3. *Clinical Education.* Ruth Smiley, OTR, M.A., Assistant Professor and Supervisor of Student Affiliations, Department of Occupational Therapy, SUNY/B.
12:00- 1:30	Lunch
1:30- 2:45	Group Discussions
2:45- 3:30	*The Clinician in Physical Disabilities.* Wimberly Edwards, OTR, B.S., Director of Occupational Therapy, Montefiore Hospital, Bronx, New York.
3:30- 4:15	Informal Consultation — Participants will have an opportunity to chat informally with Consultants and Faculty.

Wednesday, May 3, 1967 — Room 233, Norton Union

9:00-10:15	Clinical Council Meeting
10:15-10:30	Coffee Break
10:30-11:30	*The Clinician in Psychiatry.* Mary Reilly, OTR, Ed.D., Chief Rehabilitation Service, Neuro Phychiatric Institute, U.C.L.A. Center for Health Services, Los Angeles, California, and Visiting Professor, University of Southern California.
11:30-12:15	*The Occupational Therapy Consultant.* Florence Stattel, OTR, M.A., Coordinator, New York City Regional Interdepartmental Rehabilitation Committee.

12:15- 1:30 Lunch

1:30- 2:45 Group Discussions

2:45- 3:15 Informal Consultation

3:15- 4:00 Reports and Summary

Planning Committee for Occupational Therapy Program:
JOAN FISH, OTR, B.S.
CATHERINE P. O'KANE, OTR, MAOT
RUTH SMILEY, OTR, M.A.
MARGARET SMITH, OTR, B.S. (Chairman)
RUTH GEBHARDT, OTR, MPH, (Advisor)

(Left to right) Florence Stattel, Frances Helmig, Wimberly Edwards, Wilma West, Mary Reilly, Ruth A. Robinson, Nancie B. Greenman.

Education of the Certified Occupational Therapy Assistant

RUTH A. ROBINSON, OTR, COLONEL
U. S. Army (Retired)

My routine presentation on the occupational therapy assistant has been published as an enclosure with the April, 1967, A.O.T.A. Newsletter. You should have received it by now and hopefully found time to read it. (1), (a)

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(1) Certified occupational therapy assistants, AOTA, April 4, 1967, enclosure with April, 1967, AOTA Newsletter.

(a) Editor's Note: The following reference may also prove of interest: Robinson, Ruth A., "The Case for Occupational Therapy Assistants", Rehabilitation Record (VRA, Department of HEW, Government Printing Office) Vol. 8, No. 3, May and June, 1967.

The "Saturday Review," in a recent editorial—"The Environment of Language"—reminded its readers in the introduction that Julian Huxley once said that the words men use not only express but shape their ideas. (2) You can imagine how good it was to find my topic entitled "education" rather than "training" of the certified occupational therapy assistant. It might also be wise for each of us to consider what the word "assistant" means to us personally. Its meaning has bearing on our understanding of the education and potential contribution of assistant personnel to our profession.

The concept of utilizing assistant or aide personnel in occupational therapy is not new. Most of us have had the good fortune to work with skilled individuals who, because of aptitute and interest, made a real contribution to patient care and their contribution increased with on-job training and experience, a fact which pleased us because it extended our services to patients.

When it was determined in 1958 that the American Occupational Therapy Association would encourage the formal preparation of assistants, it was with the hope that new persons would be brought into the field. Because the original program was developed in the area of psychiatry, it was found that the first need was to up-grade the knowledge and competency of individuals already employed in psychiatric institutions.

This meant that the original 12-week concept structured around a forty-hour week, while difficult, was not impossible. (3) Students and instructors, although they found the program over-packed, accepted it. The original guidelines were inclusive and specific, but this approach was essential if the first programs were to be understood and accepted by all concerned.

As programs were established, it was found that it was both unrealistic and undesirable to demand uniformity. Situations differed, and these differences required recognition, if programs were to be dynamic.

When a program in general practice was approved in 1960, it became obvious that these programs would be community oriented, and the majority of students would be drawn from the community. Programs would, therefore, have to adjust to the working hours of the institutions where established. The students would have to commute and would be unaccustomed to the pressures and confinement of a structured learning situation. Authority, therefore, was obtained to permit an increase in the number of weeks to teach the same number of clock hours.

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(2) Saturday Review, Page 36, April 8, 1967

(3) American Journal of Occupational Therapy, Sept.-October, 1958

This change did not alter the concept of the need for a full time, continuous learning experience integrating didactic instruction, skills instruction, and practical experience.

As the result of specific requests, the committee on occupational therapy assistants next obtained authority to permit the establishment, on a pilot basis, of combined programs and programs in junior colleges. Finally, in 1966 it was determined that all *new* programs would be combined programs no matter where established. No deadline has been set for current programs to adjust to this change. Of the 12 operating programs, 5 are State programs and train individuals to work as O.T. assistants in psychiatry. Four programs, including one junior college program, currently cover both physical and psychosocial dysfunction. It is anticipated, in fairness to their students, that all established programs will become inclusive before a deadline is set.

It is probable that the junior college will eventually become the primary home of O.T. assistant education. It is strongly believed, however, that vocational programs are essential if we are to meet requirements for individuals who bring life skills to the task. Mature individuals are, and will continue to be, sorely needed to work with certain types of patients in difficult environments, often on a part-time basis.

The revised program outline for occupational therapy assistants (4) is now available from A.O.T.A. It required a minimum of 750 clock hours divided into 260 hours in theory, 230 hours in skills and 250 hours of practical experience plus evaluation time. The training must be completed in a period of no less than 20 or more than 25 weeks unless prior approval is obtained from A.O.T.A.

The program is far less specific than in the past. It is geared to the education of the assistant rather than to his training. Hopefully, it will present a challenge to the educators and eliminate the possibility of the graduation of stereotyped, limited personnel. We need assistants in the truest sense, not a group of dots and dittos.

The new program for junior colleges which will reflect the revised outline should be available shortly. A notice of its availability will be published in the Newsletter.

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(4) AOTA Training Program outline for occupational therapy assistants, February, 1967, with AOTA requirements for a Training Program for occupational therapy assistants, February, 1967

Clinical Education

RUTH SMILEY, OTR, M.A.
Assistant Professor and
Supervisor of Student Affiliations
Department of Occupational Therapy
State University of New York at Buffalo

Until recently most of my experience in occupational therapy has been in the clinical area and so this paper has been prepared within that frame of reference. Like most of you I've discussed the various aspects of clinical education with fellow therapists here and elsewhere. I've read articles by educators and leaders in our own field, some of whom are with us today. I've listened closely to our students as they've evaluated their clinical experiences at the end of affiliations. All have strongly influenced me and their thoughts and feelings are reflected in this brief presentation.

As greater demands are being made on us to extend our direct services to patients, the clinical centers are caught in "the big stretch" of physical facilities, staff, and finances. Physical facilities seem to be expanding rapidly. In fact some of us are trying to treat patients while carpenters, electricians, and painters work nearby—and sometimes side by side. In the classic tradition, staff and finances are another matter. They increase slowly, if at all, and in some cases diminish. I keep recalling the fable of the tortoise and the hare and wonder if the aphorism could *possibly* apply to our situation. As the numbers of students grow, the center's educational responsibilities are stretched even further. Some of us may be quite concerned about imbalances between educational and patient services. Being one of the two major laboratories for learning, it's no longer a question of recommending better communication with the schools, but a matter of action and solid implementation. In those areas where schools and centers are closely linked geographically, innovations have been made to share the teaching and financial burdens and to shift more of the student supervision to school faculty. With the development of academic programs on the high school through graduate school levels, even greater collaboration is needed to determine, 1) what knowledge and skills should be taught at each level, 2) where and in what way they can be taught best, and 3) how upward mobility can be facilitated. To make such determinations the centers must evaluate their present programs and analyze more realistically the knowledge and skills required by each staff member to function effectively, whatever his title in the complex classification system. In some centers the same therapist may be attempting to administer treatment, act as department head, part-time consultant, in-service educator of occupational therapy staff and other hospital personnel—and has guilt feelings because research is not being done. No one person, no matter how capable, can perform all these functions simultaneously and equally well. Eventually someone or something has to snap—hopefully not the therapist. But the effectiveness of each prime function is dissipated. External pressures, rigid administrative policies, and inadequate financial remuneration are powerful factors contributing to this situation. I remember one therapist saying, "What I'd *really* like to do is more teaching; I love it and I think I'm good at it. But this job pays more money and I have a family to support". Program evaluation and job analysis are long, arduous tasks fraught with frustrations and uncomfortable self evaluations, but they are a vital force in the development of more dynamic methods of manpower education and utilization. If anyone doubts the magnitude and scope of such an endeavor, may I refer him to at least forty therapists in Pennsylvania who have been deeply involved in these tasks. Recently a therapist in Buffalo reminded us of another aspect of programming which needs to be seriously considered. We have to evaluate our programs not only from the standpoint of manpower but in terms of greater flexibility in work hours to reach all the patients who need our services. Our students also must learn to recognize this fact. Our programs cannot be limited to a 9-5, Monday through Friday schedule, nor can they be conducted only within the institutional setting.

No one is completely sure of the kind and amount of information each student needs or will need in the future, no matter on what educational level he may be. No one is completely sure of how such information can be taught best. Dr. Robert Kinsinger of the University of the State of New York said, "Adequate education for those who will be entrusted with the health of their fellowmen . . . is seldom accomplished through short-term, cookbook, training facilities." But he urged us to take full advantage of the new instructional techniques now available to keep pace with the knowledge explosion.

As an occupational therapist and as a person, I am sure of one thing. The heart of our educational effort is centered in the competent student supervisor and instructor. They will determine the quality of our manpower.

In 1962 the National Education Association published a book entitled, *Perceiving, Behaving, Becoming*. The opening sentences read as follows: "Whatever we do in teaching depends upon what we think people are like. The goals we seek, the things we do, the judgments we make, even the experiments we are willing to try, are determined by our beliefs about the nature of man and his capacities. It has always been so . . . The beliefs we hold about people can serve as prison walls limiting us at every turn. They can set us free from our shackles to confront new possibilities never dreamed of before . . . Whatever we decide is best that man can become must necessarily set the goal of education."

As supervisors, what do we think our students are like, whether they are undergraduates, aides, assistants, graduates, returnees from their own post graduate work in reproduction and family life, or students yet to be identified by label? To paraphrase some answers which have been given: 1) They are more condemning and critical in their attitudes towards us; 2) They are more demanding and expect everything to be given to them; 3) They are more sophisticated and analytical in their thinking; 4) They have a deeper sensitivity and understanding of patients; 5) They have a greater capacity for self evaluation and they strongly desire to succeed; 6) They ask for more responsibility but, when given, use their own yardsticks to measure the amount of work and time they will invest. Like all sweeping generalizations, these answers do not describe accurately the individual student who is a composite of these contradictory statements.

In making comparisons, it's possible that we may be thinking in retrospect not only of students we have supervised but of ourselves during our student days. What were we like and how did our supervisors perceive us? Did they try to force us into their own mold or did they recognize our potential as individuals? I'm quite certain we can remember several of those supervisors very vividly.

Let's spotlight four of them. With a few notable exceptions, they probably were women and so I shall refer to them as "she". Like today's students, we entered our affiliations at least moderately well prepared. We came with a life outside the educational sphere and brought our own personalities and past experiences with people —and so did our supervisors. We often had nicknames for them. I'm not sure today's students engage in this pastime. If they do, they guard it well, as we did.

The first supervisor was known as "the tartar". She was highly respected in the profession, had written several brilliant articles on treatment techniques, and was deeply involved in experiments with splinting devices. Most of the time she treated us like non-human objects and had considerable difficulty in remembering our names. We avoided direct contact with her and she seemed to appreciate our efforts. But she really became "alive" during teaching sessions on splinting. As we worked she was a hard taskmaster, unmerciful in her demands, and impatient with our clumsy attempts to handle the materials. If we made the slightest mistake, the process was repeated from the beginning. She was never satisfied and expected perfection—but we learned splinting.

The second supervisor was called "the observer". She spent most of her time in the office while her staff and students treated patients. But she knew what was going on at all times. On occasion she would emerge from her office and take over completely. Afterwards some of us had to pick up the pieces she had scattered. Often they were our relationships with patients. Following the treatment sessions, she would meet with us, lean back in her chair, and ask for progress reports on our assigned patients. She'd make suggestions but never gave direct answers, referring us to articles or books on specific subjects. There was no "spoon-feeding" under her supervision. We had to develop our own initiative and skills, but our anxieties grew in direct proportion.

The third supervisor was referred to as "the dynamo". She seldom stopped moving from morning 'til night. Her energy was contagious and we were exhausted at the end of the day. Her program was superbly organized and her relationships with hospital staff excellent. She was in constant demand and everyone came to her for advice — she never let them down. She anticipated our questions, gave precise answers, and had a fine sense of humor. But she had a playful habit of ridiculing our performance and making us feel like naughty children. She was personally attractive, dramatic, and there was no situation which she could not handle with creativity and self-assurance. Both staff and students tried to emulate her but never quite made the grade. She was like a movie star —to be admired but not completely real.

The fourth supervisor was known as "the explorer". She had strong convictions and became angry with us at times. Inevitably she would forget to inform us of schedule changes and we missed several important medical lectures during the affiliation. When this occurred, she'd apologize and frankly admit that she had never learned to organize herself. She had another annoying trait—asking questions and creating problems which caught us off-guard. As we floundered she'd correct what she called "errors in judgment" and then pursued with us other possible solutions. In group discussions she somehow made each one of us feel that *any* idea expressed had merit and contributed to the group's thinking.

Of course, the tartar, the observer, the dynamo, and the explorer are only caricatures of the real supervisors drawn with a very broad brush. These caricatures are exaggerations of their strengths and weaknesses as human beings. Their strengths were the positive feelings they had about themselves and others; their weaknesses the negative feelings. But each supervisor was a *person* with a potential. We learned from them as our students learn from us today.

Wilma West has defined four roles of the occupational therapist in community health. They were, 1) the evaluator, 2) the consultant, 3) the supervisor, and 4) the researcher. If we were to apply these roles to the four therapists described above, we might say that the tartar had the potential of a researcher, the observer of an evaluator, the dynamo of a consultant, and the explorer of a supervisor. Each one of us has his potential as a *person*. As we develop this potential we shall better prepare ourselves and our students to play the roles outlined by Miss West.

It has been said that teachers provide the conditions for learning—the students do the learning. Four outstanding educators who have devoted their lives to the pursuit of knowledge have described these conditions. I'd like to mention some of them: 1) Less teacher domination—more faith that students can find answers satisfying to them; 2) Less teacher talking—more listening to students, allowing them to use the teacher and other students as a sounding board when ideas are explored; 3) Less questioning for the right answers—more open-ended questions with room for differences and seeking of many answers; 4) Less destructive criticism — more teacher help which directs the student's attention to his own feelings for clarification and understanding; 5) Goals that are clearly defined—structure is understood and accepted by students; 6) Communication and demonstration of faith that students can learn.

As supervisors, we create a dual climate within the clinical setting. One develops the student's skills and knowledge; the other nurtures personal growth. One is performed as a service; the other is offered as a gift. If we regulate this climate with sense and sensitivity and if we see ourselves and our students as people engaged in what Carl Rogers calls "becoming", we shall help to produce a group of fully-functioning human beings providing a unique health service to our fellow citizens.

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The Occupational Therapy Consultant

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The theme of this conference, Manpower Training and Utilization, is a vibrating note of concern to every health profession in our nation today.

New York State has been fortunate in having an executive head with long standing interest and knowledge of rehabilitation and an awareness of rehabilitation manpower shortages. Governor Rockefeller's 1967-68 budget(1) includes a Health Resources Commission whose purpose is to "stimulate more persons to adopt health careers and to coordinate efforts to direct persons into such careers." This commission will work with the new Health Manpower Resources Center in the State University to recommend ways "medical training in the State can be expanded and strengthened." The Governor further recommended "$1.2 million for 1967-68 to encourage the training of increased number of students of nursing, physical therapy and occupational therapy." New York State has truly moved with direction, purpose and visionary leadership to increase educational facilities, scholarships and sponsored recruitment programs.

The New York City Regional Interdepartmental Rehabilitation Committee is one of the six regional committees which, since 1964, has functioned as part of New York State's creative plan for expanded comprehensive rehabilitation services. Coordination of rehabilitation services is one of the charges given to the Regional Committee which is composed of representatives of those agencies concerned with rehabilitation in the City and State governments. In 1965 the committee selected manpower as a priority problem as each of the NYCRIRC representatives indicated this as a problem. The community supported this need in a 1965 workshop report entitled, "Guideposts and Roadblocks to Areawide Rehabilitation in New York City."(2) The second workshop was held in 1966 to explore this problem further and a report entitled, "Manpower Utilization in Rehabilitation in New York City"(3) was issued. This report produced much in thoughtful highlights on the problem and some proposed approaches to solutions.

In the figures on Occupational Therapy Manpower it was reported in the 1966 proceedings that the national supply of occupational therapists in 1966 was about 7,500 compared with the estimated national need of 15,000 for that year. There can no longer be a race with time to meet the shortages of occupational therapists. That race was lost when the runner named "Demand" passed the runner named "Supply". The logical approach is creative and sound planning in the utilization of existing occupational therapists and certified occupational therapy assistants. This is the immediate professional responsibility of every registered occupational therapist in the areas of education, administration and practice. This effort should parallel the planning to increase the number of qualified occupational therapists in the nation.

Alonzo S. Yerby, M.D. counseled as follows: "We teach our patients to make maximum use of their remaining resources and we do so with remarkable success. But, paradoxically, we rarely exhibit the flexibility and adaptability in our professional activities that we expect of our patients."(4) Does this statement apply to the occupational therapist? Are we utilizing existing resources of occupational therapy manpower to the fullest? I feel that we are moving in this direction. As a group, occupational therapists have moved with early vision and conviction in increasing the number of AMA-AOTA accredited curricula. Another stride was the training and certifying of occupational therapy assistants under AOTA approval. To bring this example closer to home, New York State has met the challenge in manpower by extending the Occupational Therapy Curricula at the State University of New York at Buffalo to include a Master's degree. In the New York City region a new curriculum of occupational therapy will start at the State University of New York—Downstate Medical Center in Brooklyn. It is also heartening to report that the State University at Buffalo has spearheaded the training of qualified occupational therapists for teaching in the certified assistant programs. In New York City the leadership has been taken by New York Medical College in the establishment of a training course for certified occupational therapists under a VRA Grant. A one-week intensive training course was conducted under a PHS Grant on consultation for the non-practicing and active occupational therapists.

Reluctantly one must admit that occupational therapists have not been highly motivated to assume supervisory, administrative and consultative roles. These positions must be filled along with the assumption of the responsibilities associated with them if occupational therapists are to fully utilize the active registered occupational therapists and the certified occupational therapy assistants. The three roles mentioned enable us to extend our professional selves. Consultation, the latest function, is the subject of my talk today. I have been asked to share with you some thoughts on the ingredients that go into producing a consultant. You can be assured that this subject is approached with humility and respect. For one cannot consult without acquiring a keener awareness of human relationships and their complexities. Therefore, let us start with an acceptable definition of consultation and move on to the intricacies of the consultation process.

Consultation has been defined by Towle as, "The giving and taking of help in an interpersonal relationship."(5) The persons who are involved in this process are the client or consultee who asks for help and the consultant who is asked to advise. As in all human relationships, it is a two-way process of give and take. The consultant can be more often defined as the giver and the client as the receiver, although the roles are interchangeable.

One basic ingredient needed by every consultant is self-awareness. This is necessary for the relationship requires mature, disciplined behavior. It is doubly important for a consultant to know his own prejudices, likes and dislikes and set of values. He must be prepared to withhold judgment and to accept the client as he is regardless of how he looks, how he acts, how he lives or how he thinks. The consultant's main concern is the problem, understanding it and discovering what help the client is seeking. To accomplish this goal, an atmosphere of interest, warmth and support must develop so that the client talks, the consultant listens and the consultation relationship develops into a climate of mutual confidence and trust.

The consultant's interest and openness is often the wedge that permits the client to overcome fear and anxiety and ask for help.

The client does not want to have his independence challenged or taken away. He wants sustained interest, warmth and willingness to help. He must make the decision to act as the result of the consultant's advice. Then the responsibility is his in independent selection. The thoughts presented in this paragraph could be the basis for another paper, which indicates the broadness of the content which can only be mentioned at this time.

The inadequate consultant tends to become authoritative and often requires "infinite wisdom" that results in an instant solution to a problem. Let me assure you there is no "instant consultation." Another negative symptom is for the consultant to talk incessantly, thereby never really listening to the client's problem thus avoiding the need to work through with the client on an approach or solution. This consultant, one can safely say, if not mature, does not have self-awareness and consciously or unconsciously needs to receive ego support rather than to give help in the consultation relationship.

Patient listening on the part of the consultant opens understanding of the problem and to a discovery of what the client wants of his services. In this listening, the injection of an occasional question guides the client and brings forth supplementary information. It is difficult to define the intuitive feelings that accompany the listening sessions as you sketch the first lines of the client's personality and performance as it relates to the unfolding problem. In the initial listening session, the information may appear to be a jumble of details, opinions and facts. The consultant, by an occasional question, assists the client in organizing and arranging material as it unfolds. This is perhaps the first part of meaningful participation in the give and take relationship. The consultant motivates by example and should feel free to use a blackboard, draw an outline or illustrate a point in an appropriate way. He gets into the problem so that the client feels a common pulse for action toward a solution.

A good listener is usually blessed by all with whom he comes in contact. This disciplined behavior takes top priority in the Consultation Guidelines which I have evolved and found useful. These Guidelines divide themselves into eight points. The first three require the undivided attention of the consultant and will be considered separately.

Problem

In the *Study of the Problem*, the consultant listens, questions, discusses, reviews documents provided by the client, observes actions and consults with other persons connected with the problem. A great collection of information in opinion, fact and impressions are tossed into one large container in the consultant's storehouse of the mind. Some attempt in selection is made but what has come in is not placed in the final storage spot.

Verification

It becomes necessary in the second stage to go through a sorting process. In this phase the consultant *verifies* the information and double checks, cross questions, rechecks verbal reports against written reports and observes action. Invalid and unessential information is discarded and the material is organized for review. Repetition of the sorting process increases the consultant's competencies as judgments must be rapidly made and with justifiable valid reasoning.

Appraisal

The results of the verification process are then reduced to an appraisal. This appraisal is made with an awareness of earlier recommendations. It must include consideration of the professional standards and agency goals. The appraisal is also made with the best objective use of the consultant's past experience. The final appraisal is presented to the client and includes the defined problem or problems and possible approaches resulting from their previous discussion. This appraisal simply means that the consultant has systematically arranged material and simplified it so that a decision for action can be made more readily by the client.

At this point the client has temporarily relieved himself of the problem and its surrounding entanglement. The consultant has moved with an organized plan to sift, sort and come up with a fresh definition, organization and approach to the problem. When the consultant completes his presentation, the responsibility for action shifts to the client.

Action

The consultant plays the role of a guide, answering questions, clearing misinterpretation and acting as a support. As a guide he can point out the good and bad features of each route as he perceives them. He cannot select the route but must wait for the client to accept and if necessary modify the route he chooses to follow. The client probes for a direction that is sound to him and within his competencies as a total human being.

These final sessions require infinite patience on the part of the consultant as the client must weigh possible approaches with his ability and capability to act. This is the point when the consultation matures. The consultant must control the desire to select or provide what he feels is the right course of action. He must sometimes accept a mediocre choice of the client and label it a valued step for the client in independent thinking. The client can only accept responsibility for his (the client's) decisions to act. When the client cannot be brought to the decision on action and accepts the consultant's approach, the consultant approves but notes this as a sign of dependence. The consultant accepts the lack of decision with an awareness that he must help the client to make later decisions that move him toward independent thinking.

Framework

The consultant helps the client to achieve a purposeful framework for action. The client's familiarity with the consultation method of working may enable him to reach a framework or plan of action with a greater degree of ease. Under these circumstances comments, observations, suggestions, verbal or written, may be sufficient. For the first consultation, however, recommendations and suggestions, verbal and written, are good procedures.

There are two points out of eight which are optional and the consultant may or may not be asked by the client to act upon. The request for these services usually occurs when the consultation relationships are secured by one or more successful consultation sessions. The client may ask the consultant to interpret the framework of action to staff, board or selected individuals. The consultant's approval and interpretation of the actions decided on by the client may lead to the removal of administrative barriers for the client. The eighth and last point, *Follow-up*, may be requested by the client, or may be the policy of the agency supplying the consultant's services.

Regular consultation on a weekly, monthly or otherwise set schedule may be the practice. A copy of the consultation guidelines which I have developed and found useful is attached. These guidelines have changed over the years and I am certain they will go through many more revisions. With each consultation the consultant extends his knowledge and ability to understand the process and, as a result, learns to give more gracefully.

Occupational therapy consultants are employed by federal, state, and local governments, as well as by voluntary and proprietary agencies. Each role of the consultant requires use of the fundamental steps in whole or part as guidelines to effective consultation. The difference is in the administration and procedures of the agency by which the person is guided. When short cuts are attempted in consultation, the result is rarely effective or the outcome satisfactory. This is disappointing to the consultant as the only job satisfaction comes from the client's ability to take action and achieve success. Occasional indirect delayed information on the success of the consultant may reach the consultant. The client justly receives acclaim and he may or may not share this good news with the consultant. Therefore, occupational therapy consultants serving several nursing homes must continuously be aware that their consultant role is partially supervisory as well as consultative to the certified occupational therapy assistants. Praise of the work of the occupational therapy assistant by the administrator to the consultant occupational therapist, reflects a consultation task well done. It further indicates that a good working relationship exists between the OTR and COTA.

In summary we can say with pride that New York State leads the nation in an awareness of and program for the utilization and training of manpower in the health services which includes occupational therapy. In New York City, leadership has been taken by New York Medical College to develop a COTA course. That occupational therapists must be flexible and adaptable in utilization of the existing occupational therapy personnel. The intelligent and productive use of certified occupational therapy assistants as an extended manpower arm of the profession should be encouraged. Movement into roles of administration, supervision, and consultation is necessary to effectively provide occupational therapy services. Consultation should be considered as a natural step in professional maturity for the occupational therapist. Eight consultation guidelines are provided which propose a plan for functioning as a consultant. The steps suggested are: 1) Study problem, 2) Verify information, 3) Appraisal, 4) Discuss appraisal, 5) Decide on Action, 6) Assist in developing client's framework for action, 7) When requested by client, interpret and 8) Provide follow up.

Effective consultation can only take place when adequate interpersonal relationships are established between the consultant and the client. Consultation will always be challenging as it changes man and forces him to deal with increasingly complex human relationships. He must learn to be a graceful giver in order to receive satisfactions from the results of a client's success. Consultation make multiple demands on the mature individual. The occupational therapist who expects flexibility and adaptability in the patients he treats must extend himself in accepting the responsibilities of consultants. It is only through extending oneself that we grow.

REFERENCES

(1) Governor Rockefeller's 1967-68 Budget. *The New York Times*, February 2, 1967

(2) *Guideposts and Roadblocks to Areawide Rehabilitation in New York City*, Proceedings of the First Annual Educational Institute and Workshop, March 4, 1965

(3) *Manpower Utilization in Rehabilitation in New York City.* A Report based on discussions held on March 3, 1966 at an Educational Institute and Workshop.

(4) *Ibid*, page 10

(5) Towle, C. *The Consultation Process.* University of North Carolina Workshop, June 1950

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Program
Department of Physical Therapy

Tuesday, May 2, 1967—Room 231, Norton Union

Theme: Trends Affecting Physical Therapy Education

Chairman: **ISABELLE M. CLIFFORD**, LPT, M.P.H., Supervising Public Health Physical Therapist, Erie County Health Department; Clinical Instructor, SUNY/B.

(Left to right) Florence Linduff Knowles, Catherine A. Worthingham, Alfred J. Szumski, Barbara A. Stevenson.

9:00-10:00 *Trends in Patient Care and in the Educational Patterns of the Health Related Professions.*
Catherine A. Worthingham, LPT, Ph.D., D.Sc., Director of Graduate Education, American Physical Therapy Association.

10:00-11:00 *Trends in Methods in Physical Therapy Education.*
Nancy T. Watts, LPT, M.A., Assistant Professor of Physical Therapy and Director of Graduate Education, Sargent College, Boston University.

11:00-11:15 Coffee Break

11:15-12:15 *Opportunities for Research in Physical Therapy.*
Alfred J. Szumski, LPT, Ph.D., Associate Professor of Physical Therapy and Physiology, Medical College of Virginia.

12:15- 1:30 Lunch

Chairman: Carl T. Anderson, RPT, M.A., Assistant Chairman and Assistant Professor, Department of Physical Therapy, SUNY/B.

1:30- 1:45 Greetings — J. Warren Perry, Ph.D., Dean, School of Health Related Professions SUNY/B.

1:45- 2:45 *Trends in the Clinical Instructors' Role.*
Barbara A. Stevenson, LPT, B.S., Instructor, Physical Therapy, SUNY/B.

2:45- 3:45 *Federal Legislation Influences Upon the Educational Trends.*

Florence S. Linduff Knowles, LPT, M.A., Consultant, Physical Therapy, Division of Training, Vocational Rehabilitation Administration, Department of Health, Education and Welfare, Washington.

3:45- 4:00 Coffee Break

4:00- 5:00 PANEL
Moderator: Paul E. Goergen, LPT, B.S., Chief Physical Therapist, Kenmore Mercy Hospital; Clinical Instructor, SUNY/B.
Participants: Speakers and Audience
Questions and Answers Related to the Day's Program.

Wednesday, May 3, 1967—Department of Physical Therapy, 264 Winspear Avenue.

9:00-10:00 PANEL DISCUSSIONS
Moderator: Mary Ellen Sacksteder, LPT, M.A., Acting Chairman and Assistant Professor, Department of Physical Therapy, SUNY/B.
Participants:
Florence S. Linduff Knowles
Barbara A. Stevenson
Alfred J. Szumski
Nancy T. Watts
Catherine A. Worthingham
Faculty of Department of Physical Therapy, SUNY/B.
The Educator Role of the Clinical Instructor.

10:00-10:30 Coffee Break

10:30-11:30 Panel Discussion Continues

11:30- 1:00 Lunch

1:00- 2:00 Moderator: Barbara A. Cossoy, LPT, M.A., Clinical Supervisor, Department of Physical Therapy, Institute of Rehabilitation Medicine; Clinical Instructor, SUNY/B.
Evaluation Practices of Students' Clinical Performance

2:00- 2:30 Coffee Break

2:30- 4:00 Panel Discussion Continues

Planning Committee for Physical Therapy Program:
Mary Ellen Sacksteder, LPT, M.A., (Chairman)
Eunice Naples, LPT, B.S.

Opportunities for Research In Physical Therapy

ALFRED J. SZUMSKI, PH.D.
Medical College of Virginia
Richmond, Virginia

It was a pleasure to be present at the dedication of the School of Health Related Professions of the State University of New York at Buffalo which is under the able guidance of Dean Warren Perry, and to participate in the Manpower Conference for the Health Related Profesions sponsored by the School.

My topic is "Opportunities for Research in Physical Therapy", and I am going to begin by making the broad general statement that the opportunities for research—good research—in Physical Therapy are absolutely unlimited.

We are in a profession where basic studies in science, education and clinical science—as applied to modern physical therapy—are just beginning to get underway.

For our graduates to be prepared and qualified to do this research, we need educational programs which will guide and train qualified students.

Initially, these educational programs do not develop out of thin air—they require finances for planning, development, assistance in staffing, fellowships for students, etc.

A number of organizations have been more than generous in assisting the Health Professions—especially Physical Therapy—develop, and I would like to take a few moments to recognize their contribution to the development of our profession.

Of course our own organization, The American Physical Therapy Association—mainly under the guidance of Miss Sarah Rogers in the Division of Education—continually plays a leading role in coordinating efforts toward improving standards of education both on an undergraduate and graduate level.

To my knowledge, one organization which very clearly recognized the need for up-grading physical therapy education was the National Foundation—or The National Foundation for Infantile Paralysis as it was known in those days. I do not have the monetary figures, but under the guidance of Dr. Catherine Worthingham who is with us today, significant sums were expended for undergraduate scholarships—and most significantly funds were made available for Masters and Ph.D. training. This was an early, far-sighted program which I feel was very influential in shaping physical therapy education as we know it today, i.e. undergraduates completing programs with Bachelor's degrees, and the possibility, in many cases, for continuation into a graduate program.

In 1958, the Vocational Rehabilitation Administration approved the first grant to the American Physical Therapy Association supporting all aspects of graduate education in physical therapy through, Masters and Ph.D. Fellowships, program development, and planning for the future. In the earlier days, under the guidance of Dean Warren Perry, and today under the guidance of Mrs. Florence Linduff, this program administered by the APTA through its Committee on Graduate Education, is an effective instrument in developing and advancing graduate efforts in physical therapy.

The program to-date has produced approximately 100 Masters and 30 Ph.D. level graduates in a variety of programs—most of these graduates are on our faculties or closely affiliated with physical therapy programs.

The program has also financed a number of National Conferences on Graduate Education, which should significantly influence our graduate programs.

I might also add that other VRA funds are available for Post-Doctoral studies—and I was a recipient of one of the fellowships which gave me the opportunity to study at the Nobel Institute for Neurophysiology in Stockholm.

These comments are made to recognize only two major, but far-sighted organizations which have made it possible for us to train people and develop programs in which recognized research in physical therapy should originate and flourish.

We can no longer sit-around and wait, hoping others will do the research which will be of significance for us. We must continue to develop our own programs, and train our own members to become competent and respected investigators, and then we must give them the opportunity in their job situation to do research.

Other speakers have referred to the Conference on Research held in Puerto Rico this past February and I want to make a few statements from that Conference which may have some meaning for us today.

First, what is Science? James Conant suggests that it is accumulative knowledge which emerges from progressive activities of man to the extent that new concepts arise from experiments and observations, and the new concepts in turn lead to further experiments and observations.

The texture of modern science is the result of the interweaving of the fruitful concepts of the past.

The test of a new idea is not only its success in correlating the known facts, but much more it is the success or failure in stimulating further experimentation or observation, which in turn is fruitful. It is this dynamic quality of science, viewed not always as a practical undertaking, but as a development of conceptual schemes, that strikes at the heart of a definition for Science, when we turn our attention to the scientific development of our professions.

Next, when we turn to consider what is research, there are also many answers to this question, but Hans Selye notes that basic research is the study of natural laws for their own sake, irrespective of immediate practical applicability, with emphasis on the qualification "immediate"—while the opposite is practical research, the kind that can be immediately applied.

He further emphasizes the ideas of Conant when he notes that the only kind of research usually designated as "basic" is true discovery—what follows is development. In medicine the discoveries of Pasteur, of Banting and his co-workers, and of Alexander Fleming are but a few of the marvels of our time which have revolutionized medicine.

Now, the possession of the ability to be able to unify even long-known facts and "discover" is then a characteristic of a research scientist. Further, he must lack prejudice to a degree where he can look at the most self-evident facts or concepts without necessarily accepting them, and he must allow his imagination to play with the most unlikely possibilities. He must be able to dream and have faith in his dreams.

In this vain, I was especially impressed with Professor Granit's observation of one of Sir Charles Sherrington's characteristics which distinguishes a truly creative mind. This is a sense of wonder, which for Sherrington lasted all his life and was the driving force that maintained his state of intellectual curiosity.

Dr. Rosinski at this Conference used the adjective *Fresh* — a fresh outlook, a fresh approach.

Professor Granit always emphasizes the need for a fresh mind to make a discovery. Early investigators may produce many pieces of a puzzle and make them available, but it takes a fresh mind to put the pieces together for the next great discovery. Granit notes that it is curious that even respected minds of an era seem to be unable to put some of the pieces together. In Sherrington's time, the decerebrate preparation was seen by many—Magendie, Flourens, Bernard, Liddle, and all the ingredients of inhibition, reciprocal innervation and decerebrate rigidity were there to be used toward the understanding of something—the fresh mind of Sherrington used this preparation as a tool for a detailed analysis of neuronal inhibition.

I make these brief comments on science, research and the scientist, not to be exhaustive on the topic, but to stress the point that we physical therapists need to capitalize on the fruitful concepts of the past; we need to develop new ideas to stimulate further experimentation. Discovery is possible, but we also need development—and we desperately need imaginative, unprejudiced fresh minds that retain a sense of wonder, to delve into the many problems that confront us in our profession.

Practically, the opportunities for research in physical therapy are unlimited. In a research area most familiar to me—neurophysiology, and most specifically electrophysiology—we are just beginning to scratch the surface of the understanding of movement mechanisms and coordinating movements. Since the discovery of the gamma system by Leksell much work has gone on to develop and implicate this system in coordinated movement. The muscle spindle has been implicated, and today we know the gamma loop to be a reality. All this information has allowed us to make some educated speculations about tone, spasticity, conditioned motor learning, the phasic activities of shivering, respiration and possibly clonus.

The physical therapist is the most knowledgeable and skilled professional in his understanding of neuromuscular function. What do we really know, or have contributed to the understanding of kinesiology. What do we know, or have contributed to the use of the electromyograph in movement problems. Included in this area of investigation are problems which can be studied by using conduction velocity studies, strength-duration curves and H-reflexes.

What do we really know or have contributed to exercise physiology—our bread-and-butter treatment technique?

—what are the energy requirements—for all ages—especially the aged
—effects of the different types of exercise
—what muscles are involved—how are they affected

Retraining—what about all these facilitory techniques—do they really facilitate? I talked to one young lady last night who does not believe that they do, many doctors are also skeptical.
—what is the effect of exercise on respiration; on circulation
—what do we know about back muscle function—in the normal, in patients with kyphosis, scoliosis—what is the EMG picture—before and after exercise; surgery

What do we really know—or have contributed to our understanding of the effects of heat?

—how do the types really differ
—effects on vital processes

How about hydrotherapy?

—can we use a jet stream of water to clean out burn wounds, does the stimulus of the water jet really hasten healing? One of our clinical therapists thinks so and has devised a technique of treatment based on the idea
—how effective is pool exercise

How about circulatory physiology?

How about ultrasound—is it really of any value—can it be used to drive drugs through the skin—one of our research therapists thinks so!

We can go on with this list indefinitely.

How about our Education programs?

—are our programs being taught most effectively—undergraduate, graduate, assistant
—do we attract the right people
—are our course plans a little old-fashioned—our programs
—do we waste the students' time
—do we use modern teaching methods effectively
—how about this trend towards health related professions
—will integrated programs help us present our subject more effectively
—what is a good program—are there several?

How about our faculty?

—are they used effectively
—can we use teaching assistants, how
—are our faculties wasting much time
—what type of person do we need as a faculty member
—what role does the clinical supervisor play in student training

How about the clinic?

—do we effectively evaluate our treatments
—do we know how to handle people, get along with people
—what do we mean by administrative skills—running a large clinic or rehabilitation center—handling assistants—cooperating with other professionals.

As you can see—the opportunities to study and evaluate a problem are endless—you tell me an area in Physical Therapy of interest to you and I can state a meaningful problem that can fruitfully be studied.

But we do need programs and trained individuals to be able to study our problems most effectively—

And in this regard, we must see to it that our brighter students are encouraged to go on into graduate programs—we must not only encourage research by our faculty and clinicians, but we must also provide adequate time and space for thinking and research. We must encourage the investigator to continue in the environment of the profession, and we must make it profitable for him to do so.

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Trends In Patient Care and In The Educational Patterns of The Health Related Professions

CATHERINE A. WORTHINGHAM, LPT, Ph.D., D.Sc.
Director of Graduate Education
American Physical Therapy Association

It has been said that the United States is the best place to have an acute illness but one of the worst in which to have a less serious illness. Whether this is a fact or not, the statement reflects both the advantage and disadvantage of the unparalleled development of the scientific approach to medicine with the resulting specialization which has occurred in this country. This increase in specialization has been more disease oriented than patient oriented.

We are all victims of the last half century in which man has gone from the steel age, to the air age, to the space age. Progress has been so rapid that its effect on the knowledge, practice and education of each of the health professions has been to learn more and more about a limited area. In fact, specialization has become the order of the day and will continue to be so. In predicting the future, probably the one thing we can be sure about is that change will be more rapid, even, than it is today.

It should give us pause for thought that medicine has become so specialized that it is often the patient himself who has to practice it. First, the patient must guess his diagnosis, frequently from information he has obtained through public relations media. Then he must decide from the maze of specialists listed in the telephone directory which doctor to select. If he guesses incorrectly, he may or may not be lucky, depending upon the doctor and upon his interest in helping him to get the person best prepared to assist him. If he is not successful in obtaining an appointment for several weeks he must decide whether his problem is urgent. If he decides it is, he will probably present himself at the emergency room of the nearest hospital.

The effect of increasing specialization of the health professions has been to fractionate the patient into his component parts, each of which is cared for by different individuals, too often, also, in different locations. This "hardening of the categories" is depriving individuals needing service of the benefits of a comprehensive approach to patient care.

The result is that there is a great increase in the number of individuals involved in the care of the patient. There is also considerable overlap of functions. For instance, should the doctor, the public health nurse, the social worker, the occupational therapist, the clinical psychologist or the rehabilitation counselor work with the social aspects of the patient's problem? Is gait training the function of the nurse or the physical therapist? Is training in the activities of daily living the responsibility of the occupational therapist or the physical therapist? Undoubtedly, some overlap of functions is desirable, too much is wasteful.

There is no point in trying to suggest an end to specialization. It is the way in which great advances in medicine have been made to the point where the resultant body of knowledge is now far beyond the capacity of any one individual to assimulate. Specialization is still increasing and will probably continue to increase. In fact, the pattern is spreading rapidly to the related professions. Nursing has specialists in public health, psychiatry, pediatrics, orthopedics and other specific areas. There are specialists, for example, in psychiatric and in functional occupational therapy. Physical therapy is not without its specialists as in poliomyelitis, cerebral palsy, arthritis and public health.

Although physical therapists have a role in the treatment of a number of acute conditons, a large proportion of their work is with "habilitation" of those who have never known normal function, prevention of disability from disease or injury, the development of remaining abilities and the maintenance of optimal function. They are primarily concerned with continuity of care whether working in the hospital or out of the hospital.

Most of our hospitals are designed for the care of acute patients. One finds in them comparatively little interest in the problems of long term or continuity care in the broad interpretation of these terms. As Robert Kemp reminds us, the bed has become the sacred symbol of medicine but it is being devalued by overuse or the wrong type of bed. Extended ward lives have harmful effects on children, old people, in fact, any patients. The psychological effects may be very devastating. One suspects with Kemp that the hospital bed may be a safe place only when it is vital to the patient's recovery.

Although there are notable exceptions, most outpatient services are still run on what J. E. C. Walker describes as the "cattle concept of care which herds patients enmasse into a bewildering environment to see a strange physician for a short time."

When we add the additonal factor pointed out by George Baehr in his stimulating address, "Medical Care—Old Goals and New Horizons" that "88% of physicians' services (doctor-patient contacts) are rendered outside the hospital," it is not difficult to see that comparatively little continuity of care, comprehensive care, or whatever term one wishes to use for *good* patient care, is available to the patient who needs it.

The emphasis placed by the medical specialties on research undoubtedly also affects attitudes toward patient care and is consuming an increasing proportion of the physician's time.

What then is a workable concept of *good patient care?* It would surprise me if all of us would not agree with the adage of ancient Greek medicine that we would like "To help our patients to die too young—as late as possible". However, we would probably not all agree on how to go about it.

The current lack of attention to the definition of good patient care on the part of the health professions is surprising and disturbing although perhaps to be expected as a result of the concentration on specialization.

In the simplest terms, good patient care is the treatment of the patient with a disease or disability in the totality of his functioning. Such a concept of care does not ignore the importance of the highly developed medical specialties nor does it ignore the social and economic forces which may cause or complicate the patient's problem.

Good patient care is "team care". So that there may be no misunderstanding, "team care" is not used here in the popular sense of a large number of medical and complementary personnel in regularly scheduled conferences. The concept which needs emphasis is the "team" based upon the needs of a specific patient. It may consist of the doctor and his patient or the doctor, the patient and the family. It may require the participation of other health personnel such as the nurse, physical therapist, social worker, occupational therapist, the clinical psychologist, the dietician or any combination of people concerned with the problems of a specific patient. The important consideration is that the patient is aided in his return to normal functioning by those best qualifed to assist him and that the time of other health personnel is not wasted.

We cannot afford the unnecessary use of highly specialized personnel who are in short supply. Nor can the great bulk of comprehensive patient care be provided by relegating all those services of the associated or complementary professions to a "rehabilitation service" or to the administration of the specialty of physical medicine. Habilitation, prevention of disability, return to optimal functioning and maintenance of the function gained require the attention of all specialties in medicine. The services of the complementary health professions, therefore, should be available to all medical practitioners.

An obvious corollary to this concept of use of the complementary health professions is that every medical practitioner must know enough about the educational preparation of these assisting professions to call upon those who are prepared to help him provide the care his patient needs.

It is not possible today for the physician in solo practice, group practice or in an institutional setting, to provide comprehensive patient care without the assistance of a number of professional and technical personnel who perform services which he is either not prepared to give, does not wish to give or for which he does not have the time.

Nor is the patient satisfied with medicine in the limited sense; he is demanding a wider spectrum of services in his effort to acquire and maintain health.

Dr. Coggeshall in his recent report to the American Association of Medical Colleges goes a step further and states, "The concept of medicine as a single discipline concerned with only the restoration of the individual from the disease state should be replaced by the concept of 'health professions' working in concert to maintain and increase the health of society as well as the individual. The physician with his colleagues in public health nursing, pharmacy, dentistry, and related professions can no longer represent the spectrum of service or promotion of health. They must colloborate with social scientists, economists, engineers and a host of other disciplines to provide for society the entire range of available preventive and therapeutic measures."

Future Direction of Patient Care

It is impossible to predict the future with accuracy but trends show the need for redirection and change of emphasis in patient care. Certainly the demands of an aging population necessitate an increasing emphasis on the treatment of chronic disease. The drama of caring for the acutely ill is having to make way for the less exciting need for maintenance of function and continuity of care over weeks and months and years. At the other end of the life span, the habilitation of the child with anomalies or injuries at birth will require periods of intensive care but also continuous attention over the years to a program of development of abilities and maintenance of function. Although emergency treatment of industrial and traffic accidents, from all indications, is not decreasing, illness and disability caused by epidemic diseases is on the wane. The incidence of chronic disease and disabilty in all age groups appears to be on the increase.

One hears or reads the statement repeatedly that patient care will be increasingly concentrated in the hospital or medical center. This does not appear to be consistent with the parallel insistence of the medical profession on private practice or the development of the small group practice. Nor does it appear to be consistent with the change in pattern of disease and disability from acute to chronic. Nor is it likely that concentration of patient care in the hospital setting will provide the emphasis on the prevention of disability, without which we cannot hope to cope with chronic disease.

As most of our hospitals are designed for the care of acute patients and it is not economically feasible to replace them with more flexible structures, means must be found to relate them more closely to the total problem of patient care. Experiments now in progress are pointing the way.

For example, within the hospital "progressive patient care" plans are being tried. For the most part these studies are limited to the care provided by physicians and nurses and are probably as much motivated by the economics of patient care as by the improvement of service to the individual patients. One finds, unfortunately, in most hospitals comparatively little interest in the problems of long term or continuity care in the broad interpretation of these terms.

The outpatient clinics, on the other hand, are showing more flexibility by creating continuity clinics, clinics which cross specialty lines and arranging home care programs. Close affiliations with nursing and convalescent homes are also on the increase.

Although we are dealing more and more with the ambulatory patient, when we look at our hospitals, even those primarily associated with teaching programs in the health professions, and see how they are being built and organized, one wonders if there is sufficient recognition of this fact. Certainly there is insufficient attention to teaching the ambulatory patient to care for himself and keep himself well.

What then is the pattern of patient care which can provide comprehensive care to those individuals who need it. There is certainly no one answer to this problem.

Services radiating out from and into the community hospital is the obvious suggestion for the economical use of personnel. This, however, envisions a broadening of interest from "acute care" to "continuity of care" on the part of our hospitals as well as the development of better mechanisms of cooperation between the hospitals and other health facilities and services of the community.

The range of services must include those needed in the patient's home, physician's office, community treatment centers, nursing homes, convalescent homes and hospitals (both general and specialized). However, the concentration of health related professionals is in the hospitals and concerned primarily with the care of the acute patient and getting these patients out of the hospitals as soon as possible.

The changing patterns of disease and disability together with the changing emphasis in patient care from "acute" to "continuity of care" or to the "acquisition and maintenance of health" are making particularly heavy demands upon many of the related health professions and will continue to do so.

It is already apparent that the role of these health professionals of the future must become increasingly professional. It will not be possible for them to personally provide all the services they are now giving to patients. They will have to be prepared to plan patient care cooperatively with physicians and other professional health personnel and to train and organize assistants to perform many facets of their services under the supervision of professional therapists. To assume this role they will need to be expert in communication, management, teaching and supervision in addition to developing increased competence in their professional discipline.

Factors Interfering with the Development of Comprehensive Care Services

Not only is the greatest percentage of health-related professional personnel located in the hospitals but the shortage of this type of personnel even in the hospitals is serious.

A few examples will point up this problem. Nursing with its hundreds of thousands of professional nurses cannot meet the needs although nurses have spread their services more widely through using practical nurses, voluntary and paid aides, than the other members of these professions. Their most critical shortage is in the leadership group, both in education and practice.

In physical therapy, there are approximately 10,000 therapists who are professionally qualified and active. In occupational therapy the number is even smaller. If one could divide these qualified therapists evenly between the some 7,000 registered hospitals, one would not have two therapists in either category in each. If you add the number of therapists needed in the educational programs and the out of hospital community health programs, the proportional need for physical therapists and occupational therapists related to supply is greater than in nursing. Nevertheless, it is very difficult to obtain recognition of this fact from local, state and national governmental agencies as the total number of therapists required seems so small compared with the hundreds of thousands of nurses.

In social work, although the available number is large and increasing, the number with interest, training and experience in medically related social work is far short of the need. One could, of course, go on to cite examples from other health professions.

Still another factor which contributes to the problem of personnel shortages in these fields is the lack of definition of role.

For example, no one would minimize the need for nurses, but I must call to your attention the fact that some of what is regarded as shortage here is really shortage of other categories of health personnel. Nursing has been quick to encompass functions of other allied health professions, particularly social work and physical therapy, but with superficial preparation for these functions. This has not been entirely the fault of nursing, but can be traced to the lack of knowledge concerning these fields on the part of a large percentage of the physican population with the resulting delegation to nurses of functions for which they are not prepared by education or experience. I would venture to say that this is not all bad, as some overlap of function is desirable as long as the primary responsibility for a specific professional role lies with the profession best prepared to take it.

One can hardly discuss the subject of personnel shortages without mentioning utilization of existing personnel. Undoubtedly, many health professionals are not economical in the use of their own time, but serious fault lies in another direction.

With the increase in chronic disease and the greatly intensified public concern regarding it, has come multiplication of governmental agencies involved with planning care for specific segments of the population. In them, one finds consultants employed from a number of health related professions, each expected to develop state programs and services relating to the interest of the agency.

This is not a realistic approach to the problem because of the shortage of individuals with preparation for working in the public health field. The development of a state service for the aging, another for crippled children and another for the mentally retarded, for example in the field of physical therapy, can only end in defeat. There are not enough qualified people nor are there going to be. A strong plea must be made for cooperative planning at the governmental level in relation to the use of allied health personnel who are in such short supply.

In fact, it would be a miracle, if in the next five years, well organized and staffed departments of public health nursing, physical therapy and social service could be developed in each of our states. We cannot afford to limit the services of these people to one disease entity or one age group. This is particularly true when one realizes that these state services are virtually the only services in the less populated areas where individuals with specific disabilities do not group themselves into convenient packages.

Governmental agencies are certainly not alone in the attempt to set up separate services for specific diseases or disabilities. The voluntary agencies, for example, in arthritis, cerebral palsy and poliomyelitis have also done so to varying degrees.

In our larger towns and cities a plea must be made for grouping the services of the complementary professional personnel in such a way that they can be of the greatest service to the largest number of physicians and their patients. Here again there are not enough trained individuals to staff existing hospitals and health agencies. The solution to the distortion of the picture of personnel shortages brought about through the unnecessary duplication of community services is certainly one of the gravest problems in patient care today but one of the least likely to be solved because of the number and power of the vested interests.

Although the roles of the established health professions are not clearly defined, each year brings additional specialized groups clamoring for recogniton as health professions. We find music therapists, corrective therapists, work therapists, physician assistants, ad infinitum. Each unmet need, or poorly met need, becomes translated into another kind of assistant or therapy. The fact that the population cannot afford to support such a variety of personnel from the standpoint of availability of students, cost of education or payment for services does not seem to be of sufficient concern.

May I suggest that our need is for fewer categories of health professional personnel, whose leadership has greater depth of preparation and greater flexibility for their respective tasks.

The Need for Fewer Categories of Health Related Professions

At the risk of almost certain disagreement, I shall attempt to identify one basic group of allied health professionals who should be available to every practitioner of medicine who needs them for the treatment of the disability of his patients.

I have selected those, who like the physician, have a personal-patient relationship, often over considerable periods of time. These are:

1) nursing
2) occupational therapy
3) physical therapy
4) speech therapy
5) medically related social work or clinical psychology or vocational or rehabilitation counseling.

The overlap in function in the second and third categories and the group under the fifth category is marked.

I reiterate my conviction that the need of the future is for fewer categories of health professionals whose leadership has greater depth and flexibility of education and service. In other words, these health professionals must become *more* professional, not less so.

Such an objective is not inconsistent with the need for increased personnel. Each of the health professions is, and I repeat, faced with the necessity of developing a service in which the professional personnel will have to be prepared to plan patient care cooperatively with physicians and other professional health personnel and to train, organize and supervise assistants and aides to perform many facets of the service, under the supervision of members of the profession.

Health Related Professional Manpower

On every hand we hear about shortages of personnel in the health professions and suggestions for solving this critical problem. Each profession indicates a current serious shortage of personnel and estimates future needs largely on the current ratio of practitioners to population adjusted to predictable population increases. Such estimates assume that the proportional needs for types of health services and the patterns of patient care will continue without change.

Some of the health professions, physical therapy included, are lulled into complacency by the fact that their schools are now full and that there is an increasing number of applicants. These professions, however, are not attracting significantly higher proportions of the present high school and college population, nor will the actual number increase of individuals trained to do more than maintain the status quo in patient care. The gap between supply and demand for the health professions is now so great that we cannot eliminate it or even markedly narrow it merely by enlarging the number of students.

Expansion of the educational programs will not in itself bring more applicants or better ones because the competition from all the professions, not just the health professions, must be met from the same limited pool of qualified high school and college graduates. Status symbols of many of the professions are changing. Science and mathematics, for example, have challenged very successfully law and medicine for supremacy.

The shortage of personnel in other fields, as well as the health professions, have been noted here to bring out the fact that even the present patterns and standards of patient care will deteriorate unless some solution to the mounting demands for health services is found other than increasing the ratio of professional students to population.

Transfer of specific responsibilities from physicians to nurses and other personnel is on the increase. It is probable that the rapid advances in technology will release the physicians from still other tasks which are now demanding much of his time and effort. As functions are transferred to other health professionals, they in turn are transferring some of their functions to well-trained but not professionally-educated assistants.

In spite of these changing roles in the health professions, regrettably, there is little discernible change in the pattern of education of the various health professions.

Education for the Allied Health Professions

It has been noted many times that the education of the medical student does little to prepare him to understand the particular competencies and limitations of the health related professions nor has he learned much about the educational requirements of these professions. Future medical curricula will need to make provisions for students to have an opportunity to obtain this information and to learn to plan and give patient care cooperatively with other members of the health professions.

All of the health professions have need to learn more about patient motivation, attitudes, feelings, behavior and the culture which characterizes human function if they are to prevent disability, assist the patient in his return to optimum function and maintain function.

The current patterns of education for the allied health professions are determined in part by the efforts of their professional associations to improve education and practice. However, it is probable that the crucial determinants of the present educational patterns are the attitudes and environments of the colleges and universities in which these curricula are developing and the administrative patterns of the hospitals in which most of the clinical education takes place.

Education in physical therapy has, to all intents and purposes, reached a minimum level of the baccalaureate degree although the minimum essentials described by the accrediting agency do not so state. It is discouraging to note that in 1965 there were still a few schools which did not require that a student, on completion of his basic physical therapy education, have the baccalaureate degree, although these schools indicated that only in exceptional cases was such a student accepted.

Physical therapy has curricula based on baccalaureate degree preparation in other fields but not leading to the master's degree and has two-year master's degree programs for basic professional preparation.

Physical therapy also has a few programs in which the master's degree is offered to students who have completed their basic professional education. Graduate work has not reached the level where a doctorate is awarded. It may be some time before this degree is authorized as most of the contributions to the development of the professions are being made through other fields such as the biological and physical sciences, psychology and sociology. We find an increasing number of therapists who have received or are working toward the doctorate in such fields as anatomy, physiology, psychology, counseling, sociology and education.

Although physical therapy curriculum directors take pride in the fact that their programs are organized within the college or university and stress the importance of the liberal arts in the education of their students, the fact is that, in too many instances, the programs are tolerated rather than encouraged in their development within the university framework. As in nursing, the tendency has been to transpose the old "hospital course" into the university setting.

The administration of the college or university for the most part has attached the curricula to the existing school and departmental structure, which has created problems for the school or department which must accept the new program and for the physical therapy curriculum which must meet established departmental requirements regardless of their suitability. We find these curricula in schools of education, physical education, and in medical schools. In all but a few instances, the relationships to the specific school and to the general university are loose and poorly defined. There are, however, an increasing number of curricula incorporated into schools of allied medical professions or health related professions.

Financial support for these programs is meagre indeed with a considerable proportion of what is available coming from governmental or voluntary agencies who have been quicker to see the need for these professionals in the changing patterns of illness and disability than the universities and their medical schools. Some programs are dangerously close to running on tuition alone, although this practice is frowned upon by the accrediting body and the professional association.

For the most part the physical facilities are barely adequate, both as to floor space provided for offices, classrooms and laboratories and its suitability for the designated purposes. The facilities for academic and clinical instruction in some programs are scattered over a large geographic area requiring undue travel time of the student. Equipment and library facilities leave much to be desired.

However, the greatest deficiency is the lack of qualified staff, both as to number and level of preparation, for the assumption of an academic role in a college or university. Some of the schools have only one full time staff member. There are only a few programs that are adequately staffed. For the most part these programs are dependent upon part time teaching personnel loosely associated with the college or university.

It is often necessary in such basic subjects as the sciences for the physical therapy curriculum budget to provide funds to the department concerned or to pay the instructor a sum over and above his regular university salary. It is encouraging that in a few instances physical therapy faculty are qualified for and have received joint appointments in the professional curriculum and in a basic science department. Although this arrangement is difficult for the individuals, it is resulting in better understanding of the needs of the physical therapy program and is developing staff capable of participating in and undertaking basic, clinical and patient care research.

Teaching arrangements in the clinical facilities present real problems. Like medical students, these students receive their clinical training almost exclusively in the acute general hospital where the patient stay is as short as possible and where there is comparatively little emphasis on comprehensive followup of patients. Unlike occupational therapy which has an internship year, during which students are rotated through several facilities, clinical education in physical therapy varies widely from a few weeks to twelve months.

It is interesting and probably unfortunate that the professional curricula in medicine and the related health professions have either placed themselves or have allowed themselves to be placed in the position where they have little control over the clinical training of their students. Although in the medical school the head of a specialty department is the chief of service in the primary teaching hospital, the interne and residency training program is seldom under the administration of the school. It is hardly necessary to state that physical therapy is in a worse position, as rarely does it have a staff member who is chief of the clinical service in the teaching hospital and still more infrequently has direct control of student clinical education. Consequently it is difficult, if not impossible, for this health profession to undertake experimental programs in the clinical preparation of its students.

Although the situation is greatly improved, there are still hospitals and agencies where physical therapy students are exploited.

Relationships between the university staff and the clinical supervisors vary. Few clinical facilities are reimbursed for supervision of students and the use of facilities is so spasmodic that it is difficult for them to build an effective clinical education program. In some instances, courtesy appointments to the staff of the college or university program are given to the clinical supervisors. Usually one or two meetings a year are planned for the clinical supervisors to meet with the academic staff. Visits of a staff member to the clinical facilities are carried out periodically, depending upon the availability of staff and funds for travel when the facilities are at a distance.

The schools conscientiously try to provide a balanced program of hospital, public and private agency clinical experience as well as practice with different age groups. Few geographical localities, however, furnish the breadth of clinical experience which will permit all students to receive practice in all of these facets of the program.

Accrediting Procedures

Approval of physical therapy curricula is done by the Council on Medical Education and Hospitals of the American Medical Association in cooperation with the professional association. This pattern of accreditation has been a mixed blessing. It has afforded protection for a minimum standard of education as pressures for lowering standards have increased with the demands for service from hospitals and other agencies. These minimum essentials, however, remained static for almost twenty years even though the field was developing rapidly. The essentials which were established were not far removed from apprentice training in a hospital setting and did little to gain acceptance of these disciplines as areas of specialization in the colleges and universities. Steady progress, however, has been made in spite of this handicap.

There is growing acceptance of the objective that educational preparation in physical therapy should qualify the graduate to work with any physician who has need of his services and recognition of the fact that to do so requires a broad basic education in the college or university as well as breadth of education in the profession.

Patterns for the Future

Although we are seeing increasing emphasis on a concept of patient care which requires attention to prevention of disability and return to optimal function as well as expert handling of the acute condition, progress in developing patterns of education which will prepare health professionals to plan and work together in such programs are developing slowly. A trend can be discerned, however, away from the isolated professional school or hospital course toward a well integrated program of general and professional education based in the college or university.

In a relatively short span of years physical therapists have progressed to a place where they are ready to move forward as members of the constellation of health professions so necessary for comprehensive patient care.

As has been pointed out it is not possible today or in the future for the physician to provide emergency and continuity care for his patients without the assistance of a number of professional and technical personnel who supplement his knowledge and abilities and save his time for those functions which he alone can perform. Nor is the patient satisfied with medicine in the limited sense, he is demanding the acquisition and maintenance of health. However, the physician has been trained to write "orders" and in too many instances other members of the health team have been taught only to carry out "orders". Consequently all find it difficult to communicate and to plan patient care cooperatively even though there is increasing recognition of the need to do so.

Perhaps the most important factor which interferes with cooperative planning of patient care is the disparity in educational background among the leaders of the various health professions. If one also notes that personnel shortages in many of the health professions are now so great that an increasing number of assistants with less than professional education are used, the situation becomes even more difficult. In fact, it is not always possible for the physician in the clinical situation to distinguish the professional from the non-professional personnel caring for the patient because of his own lack of knowledge of the preparation and function of these individuals.

If physical therapists are to be able to fulfill their role as professional members of the health team, educational programs for these therapists must be strengthened. Their education must not be "dead end". Requirements in the general education and professional field should permit the interested and competent student to continue his professional development without penalty.

In addition, studies need to be made to determine that baseline of education in the biological, physical and social sciences which is necessary for the members of all the health professions if they are to be able to work as a team.

Although the ability to communicate with each other and with the patient is an obvious requirement for all members of the health professions, remarkably little training for this function is included in current programs. Therefore, specific attention and training should be directed toward competence in the communication skills.

It has been pointed out that there are not going to be enough physical therapists to perform all of the patient care services now given by professional therapists. Therefore, emphasis in the curriculum must be placed on management techniques for organizing and supervising a service which will have to include well trained but not professionally trained assistants. The physical therapy teaching programs should take the initiative in developing and evaluating plans to improve patient care services through the utilization of available professional personnel and well trained assistants.

Because of the increase in chronic disease and disability, medicare and related legislation, patient care programs of the future cannot be primarily hospital centered. In consequence, physical therapy educators as well as those in the other health professions must find ways to prepare their students for participation in convalescent home programs, other community agency treatment programs and for care in the patient's home.

Physical therapists will be participating more and more in basic, clinical, patient care and educational research. Introduction to the fundamental requirements for research, at least as far as the development of the ability to record clinical observations and to carry out accurate tests and measurements within the scope of the profession, should be required.

One should remember also that each of the health professions represents a vested interest. It is not reasonable to expect that one profession with its vested interest will promote the development of another field particularly if by so doing any of its members feel a threat to their hard earned status. Therefore, the placement of these teaching programs in physical therapy within the college or University must permit professional development.

There are those who are convinced that these programs should be under the administration of the medical school, arguing that only in this way can they develop properly in relation to medicine. What is meant by "properly" is the question. It may mean that there will be every opportunity for professional development or it may be the means of making sure that these therapists are not "over-educated", depending upon the attitudes of the dean and key faculty. Whatever the case, in time of crisis, the first space to be appropriated and the first budgets to be cut are likely to be those programs not regarded as "medical" education.

Placement in the medical school does not assure the growth of a sound educational program for other reasons than the above, one being that basic professional education in physical therapy is, in large part, closely related to the programs of the general university. Another factor is the difficulty in locating the curricula within the medical school. There are presently several patterns of adminstration, for example:

1) directly under the dean (who rarely has time to give the program the attention it needs)
2) under the department of physical medicine or orthopedics (which may not give the opportunity for educating therapists prepared to work with all medical specialties) and
3) under the department of preventive medicine (which is more likely to encourage a broad program because of the nature of this specialty).

Other patterns of organization and administration of these programs were mentioned in a previous section. The only one which will be discussed further is the school of allied medical professions or school of health related professions.

There is a possibility for a balanced approach to the education of the health professions in a university in which the administrative pattern includes a vice-president in charge of medical affairs, under whom are organized the medical school, school of public health, school of nursing, school of allied medical professions, etc. The weakness in this pattern of administration can be a tendency to concentrate on the professional aspects of the educational programs at the expense of the humanities and social sciences.

One pattern which seems to provide a mechanism for breadth and balance is that found at Western Reserve University where the general faculty, composed of full professors and others appointed for specific terms, are empowered to develop new curricula, to organize study committees across school and departmental lines and to create positions where needed for the coordination of such activities. Individuals frequently are appointed to the faculty of more than one school of the university. This plan is proving to have the flexibility which makes possible the growth of the various health professions in an atmosphere of mutual trust and respect.

The placement of educational programs in physical therapy within the general university will probably have to conform to the current policy of the institution but the advantage of providing some sort of mechanism for inter-school and inter-departmental cooperation in education for the health professions should be called to the attention of universities establishing these programs.

Trends in education and practice, in the long run, will develop on the basis of demonstrated needs. This presents a challenge to each one of you.

Perhaps the two most promising trends for the health professions are:

1) the increasing emphasis on continuity of comprehensive patient care and
2) the increasing recognition by the health professions that only with continuing education can the best interests of the patient and the profession be served.

For example you, as physical therapists, cannot be satisfied with the knowledge and competence you acquired as of the date you completed your basic physical therapy education, whether it was 1930, 1940, 1950, 1960 or 1967. The entire field of medicine and the related health professions is changing so rapidly that your basic physical therapy education is obsolete, at the most, in five years.

Therefore, I leave you with the challenge that the concepts of "continuing comprehensive patient care" and "continuing education" are the future of your profession. Only you can determine the rate of progress.

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DEDICATION

School of Health Related Professions
Sunday, April 30, 1967
3:00-4:30
Millard Fillmore Room, Norton Union

PETER F. REGAN, Chairman

MARTIN MEYERSON
President
State University at Buffalo

HAROLD C. SYRETT
Vice-Chancellor of the University,
State University of New York

PETER F. REGAN
Executive Vice-President
State University at Buffalo

Guest Speaker
DARREL MASE
Dean, College of Health Related Professions
University of Florida
"Straightening Crooked Paths"

J. WARREN PERRY
Dean, School of Health Related Professions
State University at Buffalo
"From the Cradle to the Dream"

Reception—Norton Union
4:30-5:00

Reception and Dinner
Buffalo Club
6:30

Tuesday, May 2, 1967
Reception
Faculty Club, 5:30-7:00

Straightening Crooked Paths

Darrel J. Mase, Ph.D.
Dean, College of Health Related Professions
University of Florida

Vice President Regan, President Meyerson, Vice-Chancellor Syrett, Dean Perry, Distinguished Guests and Friends of the State University of New York at Buffalo—

It is indeed a privilege and an honor to be participating in the dedication of your School of Health Related Professions, the fifth school in your Health Sciences Center. Your Executive Vice President, Dr. Peter Regan, was one of the very best supporters of our College of Health Related Professions from the day in June 1958 when he came to Gainesville to head the Department of Psychiatry in the College of Medicine until he left to go to Buffalo in June 1964. Those who innovate are often lonely and frequently lack acceptance and support. Our College survived in very trying times only because of the support of three or four respected individuals in important administrative posts. I want to thank you, Dr. Regan, for being one of those individuals and for so ably helping with our survival, and to commend you for your leadership in establishing a School of Health Related Professions at the State University of New York at Buffalo.

Then when a Dean was selected for your School of Health Related Professions you chose a man whom I have admired and respected and with whom I have had the privilege of working for a good many years. It pleased me, as I'm sure it did you, when Dr. Warren Perry decided to change his professional career from giving money away through the Vocational Rehabilitation Administration to seeking funds to support academic programs and research in the health related professions.

Dean Perry, our job descriptions are now the same.

A Dean's Lament

I'm not allowed to run the train
Or see how fast 'twill go,
I'm not allowed to let off steam
Or make the whistle blow,
I cannot exercise control
Or even ring the bell,
But let the damn thing jump the track
and see who catches hell!

My subject is "Straightening Crooked Paths." That is what you are doing as you gather together those who have found homes in various administrative structures. Very often these programs have been unwanted and unnurtured, and like children in similar straits they have not done as well as they might. These crooked paths were established because of expediency, to meet the needs of an individual practitioner, medical or dental specialty, hospital or health facility. These crooked paths have been followed because it is easier to follow an established pattern or path than to deal with the vested interests and the resistentialism of professional groups to straighten crooked paths. There are many paths which need to be straightened in universities if we are to prepare people for tomorrow rather than to continue to prepare for yesterday.

The lines of the following poem by Sam Walter Foss will illustrate the point:

THE CALF PATH

One day, thru the primeval wood,
A calf walked home, as good calves should;
But made a trail all bent askew,
A crooked trail as all calves do.
Since then two hundred years have fled,
And, I infer, the calf is dead.
But still he left behind his trail
And thereby hangs my moral tale.
The trail was taken up next day
By a lone dog that passed that way;
And then a wise bellwether sheep
Pursued the trail o'er vale and steep,
And drew the flock behind him, too,
As good bellwethers always do.

And from that day, o'er hill and glade,
Thru those old woods a path was made
And many men wound in and out,
And dodged, and turned, and bent about
And uttered words of righteous wrath
Because 'twas such a crooked path.
But still they followed—do not laugh—
The first migrations of that calf,
And thru this winding wood-way stalked,
Because he wobbled when he walked.
This forest path became a lane,
That bent, and turned, and turned again
This crooked lane became a road,
Where many a poor horse with his load
Toiled on beneath the burning sun
And traveled some three miles in one,
And thus a century and a half
They trod the footsteps of that calf.
The years passed on in swiftness fleet,
The road became a village street
And this, before men were aware,
A city's crowded thorofare;
And soon the central street was this
Of a renowned metropolis
And men two centuries and a half
Trod in the footsteps of that calf.
Each day a hundred thousand rout
Followed the zigzag calf about
And o'er his crooked journey went
The traffic of a continent.
A hundred thousand men were led
By one calf near three centuries dead.
They followed still his crooked way
And lost one hundred years a day
For thus such reverence is lent
To well-established precedent.
A moral lesson this might teach,
Were I ordained and called to preach,
For men are prone to go it blind,
Along the calf-paths of the mind,
And work away from sun to sun,
To do what other men have done.

They follow in the beaten track,
And out and in, and forth and back,
And still in their devious course pursue,
To keep the path that others do.
But how the wise old woods could laugh,
Who saw the first primeval calf!
Ah! many things this tale might teach,—
But I am not ordained to preach.

Let me commend you for straightening a crooked path in the selection of the name of your School of Health Related Professions, which we are dedicating. In 1956 when we were considering an administrative structure for preparing health personnel, it was my proposal that we establish a College of Associated Health Professions. At this time there were twelve colleges and two schools at the University of Florida. It was proposed by the administration that we be a school under a college. This was rejected. One of the university administrators was unwilling to approve the word "professions" in the title. He was an engineer and informed us engineering had been trying to be accepted as a profession for 140 years. He was not willing to have physical therapy, occupational therapy, medical technology, and other health related areas be referred to as professions. So rather than lose an idea, we became a College of Health Related Services. Then about two years ago we changed "Services" to "Professions" in the title. So, our staff is pleased that you, too, are a School on a par (at least on the organization chart) with other schools and we are pleased with the selection of the name, School of Health Related Professions.

Loma Linda University, California, has a School of Health Related Professions; Indiana University, a Division of Allied Medical Sciences in the School of Medicine; Medical College of South Carolina, a School of Allied Health Sciences; Ohio State University, a School of Allied Medical Services; Temple University, a College of Allied Health Professions; University of Kentucky, an Allied Medical School; University of Illinois, a School of Associated Medical Sciences in the College of Medicine; Boston University, a Sargent College of Allied Health Professions; Northeastern University (Boston), a Division of Allied Medical Sciences; and St. Louis University, a School of Nursing and Health Services. This list of 13 comprises those with established programs whose deans met last Thursday and Friday to consider common objectives, goals, and problems. This is indeed a potpourri of titles, and there shall probably be more added by the many universities that are considering a similar administrative structure for preparing personnel for the health professions. It would be desirable if we could find a name common to all. This, too, would straighten a crooked path which has evolved in a short period of time.

At least there have been no schools or colleges established yet with the word "paramedical" in the title. It is difficult to understand why this word was selected to describe those of us who wish to join hands with medicine in the care and treatment of patients. When so much of the medical vocabulary is built around prefixes and suffixes, we might have expected someone to check on the derivation of "para." Dorland's medical dictionary says it is a prefix meaning "beside, beyond, accessory to, apart from, against." Webster's offers: "by the side of, beside, along side of, by, past, beyond, to one side, aside from, amiss." Six of the terms used in these two dictionaries are indicative of the concept desired, while eight give a different meaning. It is not necessary for us to add to the confusion when we have "allied," "associated," and "health related" to accompany "professions."

Other terms which are found in the literature dealing with the health occupations (and especially those to be prepared in technical schools and junior colleges), are the words "sub-professional" and "non-professional." The position of every health worker must have dignity. To the professional person "sub" and "non" mean "below me." To the person we wish to recruit to help meet the manpower needs, "sub" and "non" mean very low on the scale of respectability. It somehow implies "in the gutter if not in the sewer, and no way to get out." "Sub" and "non" give no feeling of a health ladder which can be climbed as has been proposed on numerous occasions by Surgeon General Willam A. Stewart. I would like to propose that we refer to these people at various levels not as "sub" professional or "non" professional but rather as supportive personnel.

A changed attitude on the part of those in the health professions as well as our citizenry is necessary in order to meet health manpower needs. This new attitude must be one of determination to succeed no matter how it affects vested interests and current patterns. It must give dignity to all the health oc-

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cupations. If we can harness our resources to walk in space and reach the moon, then we can provide the needed manpower to serve all the people with quality health services. We must serve them today in ways quite different from those we thought yesterday were correct. Our ideas in respect to the provision of quality health services must be flexible, innovative, and adaptive to change.

This period in our history is a thinking man's revolution. We are in a knowledge explosion. Mindpower is our most valuable resource. No longer do we have time for philosophizing in many committee meetings and conferences to determine how to meet health manpower needs. We must apply the concepts and knowledge we have. Then let us alter our course as we discover better procedures.

In our planning for additional and new health personnel we must recognize the sociological factor that everyone is going to school longer. This is a part of the mores of our culture. It is more common today for students to obtain a four-year college degree than it was only a few years ago to earn a high school diploma. We are now extending universal education to two years beyond high school with the development of junior colleges. By 1975, it is anticipated that 80% of all high school graduates will go to college. We are now proposing to start children to school at four years of age instead of five or six, and the Office of Economic Opportunity is quite properly starting the education of the underprivileged much earlier.

Historically, many of the allied health professions have evolved because medicine, or often a specialty of medicine, has chosen to offer a preceptorship in the hospital to get the person ready to perform certain duties and responsibilities. A certificate was granted at the conclusion of the training period to indicate that certain basic skills had been mastered. Adequate general knowledge and development of capacity for independent action were generally not provided.

Youth and their families now desire an associate degree from a junior college or a more advanced degree from a college or university. Parents want their children to be educated as well as trained. Hospitals cannot be expected to continue to write off these educational and training costs to patient care. Universities, colleges, and junior colleges are going to have the obligation of providing the educational programs for those entering the allied health professions who will expect two or more years of generalized and specialized education. Hospitals and other community health settings may, however, continue to provide opportunities for clinical training. Society now demands extended educational experiences as well as specialized skills. Whether it is necessary to give both technical training and associate or advanced degree education in order to produce people who can perform routine skills under supervision is not the total issue. In our society education has been extended, and the federal, state, and other funding agencies will support degree-granting educational settings rather than non-academic, certificate-granting agencies.

However, another change is inevitable. If we are to provide the kind of academic experience indicated in the clinical affiliation, then the service aspects of hospitals cannot be staffed by interns, residents, and other students in training who represent the many health professions. The hospitals and other health care and treatment facilities must be able to run as easily and as well without the interns, residents, and students in the health professions as with them. The hospital must be adequately staffed by teachers and professors from, or approved by, academic settings in order to see that the student may have a truly enriched and academically-oriented clinical learning experience. This will really be straightening crooked paths.

But there is still another path that needs our attention. We should think in terms of mindpower utilization rather than of manpower utilization. Manpower utilization somehow implies more of the same: physical therapists doing what physical therapists now do, nurses doing what nurses now do; dentists doing what dentists now do. Mindpower utilization implies using the knowledges, skills, and capacity for independent action our health personnel for those things for which they are uniquely qualified, and it means delegating to others tasks previously assumed to be the vested interests of the professional. Half or more of those in the health occupations have bachelor's, master's, or doctor's degrees. This makes the health occupations lopsided in respect to the duties to be performed, since those with advanced degrees are doing things which do not require their knowledge, skill, and capacity for independent action.

Table I offers a possible plan for academic training, at four levels.

TABLE I

A Numerical Representation (0-4+) of Amount of Knowledge, Skill, and Capacity for Independent Action as These Relate to Four Levels of Education and Training for Personnel in the Health Occupations

Level of Education	Knowledge	Skill	Capacity for Independent Action
I—Doctorate	4+	4+	4+
II—Bachelor's and Master's degrees	4+	4+	4+
III—2-year College Associate degree	2+	4+	1+
IV—On-the-Job Vocational or Technical Training	1+	4+	0

Mindpower utilization means that the individual with advanced education and training will always supervise and direct the activities of the individual with less training. The physical therapist at Level II works under the prescription and general supervision of a physician. When we have a physical therapy assistant, she will be at Level III and work under the physical therapist; and the physical therapy aide trained at Level IV will function under the physical therapy assistant. Such a delegation of responsibilities would lead to efficient utilization of mindpower, would maintain quality services, and would improve the lopsided distribution of trained workers in the health occupations.

This delegation of previously assumed responsibilities will be threatening, especially to the most highly educated in the various specialties. However, if we are to maintain quality services, then the day of the one-to-one relationship previously enjoyed by those in the health occupations must become a thing of the past. This change will also be threatening to some patients and loved ones who have desired and enjoyed this one-to-one relationship, and yet we find research and demonstration projects where this delegation of previously assumed responsibilities is being accepted by both patients and professional personnel. If we do not train supportive personnel to work under supervision, we are going to have a lot of new breeds of people from all kinds of technical schools going out and doing the sorts of things that we do not want them doing and that they should not do.

Arnold Toynbee said fifteen years ago something to the effect that the Twentieth Century will be chiefly remembered as an age in which the human society dared to think of the welfare of the whole human race. That day has arrived, as society demands that all citizens attain well-being through good health care and that comprehensive rehabilitation services for those with illnesses and disabilities be among the "rights and privileges" of all our citizens. The making of this decision without adequate time to prepare the needed manpower for the necessary extension of health and rehabilitation services provides a challenge that demands most thoughtful and considered judgments.

Let us in closing enumerate some of the objectives and goals of this School of Health Related Professions as well as those of similar colleges and schools:

1. Preparation of those in current and yet to be established health occupations at the level of functioning as determined by the respective college and university.

2. Leadership in determining the respective roles to be played by those to be prepared in the respective disciplines at the various levels of functioning.

3. Commitment to assisting those with advanced preparation in the respective disciplines to be truly professional in their own right.

4. Assurance that those prepared in such colleges and schools shall develop respect for and understanding of other health occupations as well as esprit de corps and security in their own.

5. Willingness to give leadership and assistance in the preparation of teaching materials at all levels of preparation for the respective disciplines in which the college or school is actively engaged.

6. Assistance in changing the attitude of society and various professional groups regarding new and evolving roles to be played in health care and well-being.

7. Readiness to give dignity to all who choose to work in health facilities or for the health and welfare of our citizenry.

8. Recognition that in college we can only get people ready to learn throughout life, and can only give them sufficient knowledges, skills, and capacities for independent action to begin to practice their specialty.

9. Dedication to an extensive program of continuing education for past, present, and future graduates and other personnel in the health occupations since learning is now a life-time process in order to practice our specialty.

10. Commitment to teaching all students the necessity of adaptability and awareness of the need for change in relation to the rapidly expanding knowledges which quickly alter current skills acquired while in school.

Attainment of these objectives and goals will straighten many crooked paths in providing personnel for our third largest industry (health) and will provide the needed manpower to meet our commitment to society for quality health services.

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From The Cradle To The Dream

J. Warren Perry, Ph.D.
Dean, School of Health Related Professions,
State University of New York at Buffalo

On behalf of the students, faculty and staff of the School of Health Related Professions, I wish to express to all of you our heartfelt appreciation for your joining us here at Buffalo for the Dedication Ceremony of our new School and for our Manpower Conference. Although we would like to do so, it is quite impossible, of course, for us to give recognition to each of you individually, so may I simply say that we are especially proud to have here with us the following kindred spirits: the executive deans and staff from the SUNY offices in Albany; official University administrative personnel from the Buffalo campus; the presidents and deans of many of our cooperating two-year colleges in the SUNY system; representatives from Washington of many of the leading Federal agencies with which we work, particularly those of you here from branches of the Department of Health, Education and Welfare; executive directors and representatives of all the major health organizations and professional organizations; the representatives of other universities which have also formed divisions, departments, schools and colleges of allied health professions; members of this local community; and last, and yet most importantly, members of our student body, our faculty, staff and others without whom these events could not be possible.

Just last evening, I returned to the campus from two rather hectic days and nights of meetings in New York City with a committee of the National Research Council of the National Academy of Sciences; and in Washington at the President's Committee on Employment of the Handicapped. Actually then, until this morning I had not been able to plan specifically exactly what I wanted to say to you today.

But naturally, I had been thinking about it for quite some time; for in my life as a Dean, a title with which I have been dignified for about eight months only, I certainly was well aware that this was a major event for our program here and for me And so, I presume for inspiration, I began to read!

Let me share with all of you some of the quotations and words of wisdom which I gleaned therefrom. I feel that they have definite relevance to our gathering here today:

> "There is another word for being a good trouper, a word that show business would think too grand to use. That word is 'dedication' . . . a word, I think, which is the secret of anyone who succeeds at anything."
>
> . . . Cecile B. DeMille

And I thought of all the work that many people right here in this room have done toward the development of the departments that have been grouped within the organizational framework of HRP.

Especially did I think of Dr. Regan and Dr. Rekate, of the Chairman of each of the Departments, including our Executive Committee. I know too that the faculty in these Departments are today giving 150 per cent of their time and efforts to help us build together here a significant program in the allied health fields.

Then I turned to the words of Adlai Stevenson, written in 1952 when he was accepting the nomination for the Presidency:

> "I hesitate to seek your nomination for the Presidency because the burdens of that office stagger the imagination. Its potential for good or evil now, and in the years of our lives, smothers exultation and converts vanity to prayer."

Naturally our level of responsibility cannot be compared with that of which Mr. Stevenson speaks. Yet as I ponder the challenge here of building a new School and of fostering the environment in which it will be accepted here on this campus, I feel somehow that his reduction of "vanity to prayer" is most appropriate.

At a conference several months ago in Puerto Rico, where leaders from the fields of occupational therapy and physical therapy met to plan cooperative research programs, I had the honor to be present as a consultant. On that occasion, I used certain quotations dealing with the importance of change and progress in all that we do today; and the following are my favorites in that they are pertinent to the changes and progress to which we aspire in HRP:

> "Nothing in progression can rest on its original plan. We might as well think of rocking a grown man in the cradle of an infant . . ."
>
> . . . Edmund Burke

I'd like to share this particular quotation with the coordinators of our facilities here at the University; for our projected plans will need and deserve a very expansive "cradle" indeed if we are to carry out our objectives.

Now I would ask you to note Washington Irving's whimsical approach to change:

> "There is certain relief in change, even though it be from bad to worse; as I have found in traveling in a stage coach that it is often a comfort to shift one's position and be bruised in a new place."

And, finally, Lincoln's:

> "The dogmas of the quiet past are inadequate to the stormy present. As our case is new, so must we think anew and act anew."

Our task today is likewise a unique one. We are actually *not* here to dedicate a building or a facility. Rather we pay tribute to an administrative idea or ideal, a new administrative structure here that permits the allied health professions to take their legitimate place beside all of the other major professional fields devoted to the training of professional health manpower.

In our new School, however, the professional integrity of each field is protected and assured without altering in any degree our close working relationship with the School of Medicine, which certainly fathered and originally gave a "home" to these programs. Now indeed, we are ready to grow; and in no time we hope that our development will be so rapid and so mature that our parents will scarcely be able to recognize us. As trustworthy adolescents, we hope that we will be given the opportunity to realize our potential and to make our real contribution to all of our "relations" in the health fields by helping them to do a more effective and comprehensive job.

Also as a budding adolescent, our School is attempting new and stronger relationships here on campus with all of the other programs charged with similar training responsibilities; Rehabilitation Counseling, Clinical Psychology, Speech and Hearing Therapy and Social Work. As we begin to plan together for clinical programs in the proposed University hospitals, may our relationships take on the characteristics of a federation with mutual benefits to all, while remembering always that our patients and clients should be the primary beneficiaries.

We are especially proud to have with us today our clinical instructors, people who represent the large number of affiliated hospitals and clinical facilities which are an integral and essential part of our total School program. Patterning our program after that of the other Schools in the Health Sciences, we have already dispensed with the title of "Clinical Supervisor," and we have been proud to confer the title of "Clinical Instructor" upon this important part of our faculty. We trust that this shows our dependence upon them and our respect for their contribution to our program.

Indeed this segment of our School's activities in clinical education has increased over thirty-five per cent during this first year of operation. We are proud, too, to announce that the training grant received from the Vocational Rehabilitation Administration made it possible for us to invite our clinical instructors from a five-state area to be with us here and to participate in these programs. During this Manpower Conference, when our plans are being shared for future implementation here in Buffalo, their recommendations and advice are eagerly awaited.

Anyone who knows me at all well is aware, I am sure, that music, and particularly grand opera, is my major avocation. Therefore I'd like to make a comparison between some of the problems and opportunities that lie immediately ahead for our new School and the kinds of problems and challenges often faced by directors and managers throughout the world in mounting a first-class production of an operatic work.

Here, however, we have a unique opportunity in producing this show; for the complete libretto and score have as yet not been written. Nowhere in this country or abroad can we turn for the perfect pattern, for everywhere in the health fields we will find other directors who are innovating, but all is characterized by transition and change. Even as do composers, each of us has the task of orchestrating and adding new rhythms, new notes and important themes. I trust that here at Buffalo we have the potential to compose some significant arias and duets: we may even try some complicated quartets and quintets of coordination and communication among our programs. Out of the seeming cacophony of modern sounds and themes, I hope that we will be able to distinguish a pure melody of operation.

The stage on which we will produce our opera is totally inadequate now; the new sets for our future productions are now only in the process of being designed. In the form of our projected Health Sciences Center, we have our own Lincoln Center for the Performing Arts to create here. It is especially heartening to note that within the past month the decision has been made that our new School, along with the entire Health Science program, will be located in a total campus setting rather than on an isolated stage. We therefore need to ask our national consultants here for this Conference to dream along with us and to help us plan some of the most inspired, imaginative and yet functional settings possible in line with our future needs. Actually we are right at the very point when their advice and recommendations will prove the most valuable.

Thus far, our cast has only begun to be assembled, though we do have a wonderful start with many seasoned performers who have been a part of this "show" for some time. Like regular talent scouts, we shall be looking for some true prima donnas and some new stars in the allied health professions. Nothing would please us more than to discover a Maria Callas of the health world . . . so long as she keeps her emotional life in check. Imagine a Franco Corelli or Renata Tebaldi to lend quality, taste and beauty to all that we plan to undertake here!

As is true in any great production of opera, the chorus (in our case made up of our staff of assistants and secretarial support) is just as important . . . each one of them . . . as is the performance of our main stars. Without total commitment and total cooperation from this important group, our performance will never get off the boards successfully.

And what about the conductors, our chairmen of Departments and those of us in administrative responsibilities for this program?

What kind of performance will we be able to inspire from this stellar cast? Without our being quite as autocratic as Toscanini, I wish that we all had his genius for eliciting from each person performing for him that superhuman effort which is the ultimate achievement. I'd hope that each of us could somehow have the sensitivity in performance of a Pierre Monteux or a Koussevitsky, the strength and power of Bruno Walter or Wilhelm Furtwangler. And we must all recognize that we can never hope to achieve national recognition wthout responding to the modern approach in sounds and themes of Buffalo's own Lucas Foss. Grant us a measure of the showmanship of a Leonard Bernstein; for we want to be able to achieve maximum communication with the health community regarding what we are attempting to accomplish in our program.

Put all of these conductors and their approaches together and perhaps they spell artistic chaos. But may our faculty and administration draw from these disparate approaches those elements that will offer guidance and sensitive leadership to our baton.

We'll never be able to put on a first-rate production without strong financial endorsement. We will be looking for benevolent benefactors and for assistance from dedicated volunteers. And though the great opera houses of the world are always running in the red, and have not yet achieved financial stability, we will ever seek and plead for State and Federal subsidy!

And what about our audience? The patients and clients of this community and of this great State certainly need us. For them, we must prepare the kinds of quality performance and performers for which they are beginning to pay and from which they have the right to expect the best. And so today at this Dedication Ceremony, the prelude is being played.

I am pleased to tell you that we have received congratulatory telegrams from Senators Kennedy and Javitz, from Congressmen Dulski and McCarthy, and from Governor Rockefeller and Mayor Sedita.

How else can one respond to their kind and wonderful words of encouragement except to say upon behalf of our students, our faculty and staff in HRP, that we accept the challenge of these words with the commitment that our School, as an integral part of the Health Sciences Center, will so train and mold the mindpower and manpower of allied health professionals that we shall inevitably become an invaluable partner in the health community here. May we instill in our students the knowledges, skills and attitudes that will make them worthy members of the allied health professions. All in all, may our School make its own fine contributions to the realization of the dreams of many of us here assembled who hope to make the State University of New York at Buffalo one of the truly great educational centers of this Nation.

Indeed these are words that are very easy to speak . . . but from this day on, we must try to live up to them.

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State University of New York at Buffalo
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- School of Medicine
- School of Dentistry
- School of Pharmacy
- School of Nursing
- School of Health Related Professions
  - Department of Medical Technology
  - Department of Occupational Therapy
  - Department of Physical Therapy
  - Community College Health Careers, Teacher Preparation Program
  - Laboratory Animal Science
- Health Sciences Continuing Education

FACULTY OF SOCIAL SCIENCE AND ADMINISTRATION

- School of Social Welfare
- Department of Psychology
- Speech and Hearing Clinic

FACULTY OF EDUCATIONAL STUDIES

- Counselor Education—Rehabilitation Counseling

FACULTY OF HEALTH SCIENCES

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SCHOOL OF PHARMACY
Daniel H. Murray, B.S.P., Ph.D., Dean

SCHOOL OF NURSING
Ruth T. McGrorey, M.A., Ed.D., Dean

SCHOOL OF HEALTH RELATED PROFESSIONS
J. Warren Perry, Ph.D., Dean

■

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This Conference was supported in part by the Vocational Rehabilitation Administration, Department of Health, Education and Welfare, Washington, D. C., Grant No. 675-T-67.

The printing of this publication was the responsibility of the State University of New York at Buffalo.

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